THE

Modern Husbandman,

For the Month of *April*,

Containing the following Particulars, *Viz.*

I. A CASE, ſhewing how a large Field was ſown with BARLEY in a wrong Manner, and how a FARMER loſt moſt of his Crop by it.

II. Of Sowing BARLEY, PEASE, and THETCHES, *&c.* by the DRILL-PLOUGH.

III. How a GENTLEMAN made ſeveral IMPROVEMENTS in his ESTATE, by this AUTHOR's DIRECTIONS.

IV. The VALUE and USE of the DRAUGHT-PLOUGH, for plowing MARSH-LANDS and other Soils.

V. Of a famous, ſmall, cheap TOOL, for cleaning WHEAT, BARLEY, PEASE, common HORSE-BEANS, and TICK-BEANS, that ſupply the Place of the great THIRTY POUNDS WIRE SCREEN, whereby a Perſon may obtain the BEST of any of theſe SEEDS.

VI. Several ACCOUNTS and IMPROVEMENTS, from divers Parts of this KINGDOM, publiſhed for the IMITATION of others.

VII. Why it is too late to ſow WHEAT in this MONTH.

To which are added,

Many other CURIOUS and SERVICEABLE MATTERS, never before publiſhed.

By WILLIAM ELLIS,

A Farmer, of *Little Gaddeſden*, near *Hempſtead*, in *Hertfordſhire*.

LONDON:

Printed for, and Sold by T. OSBORNE, in *Gray's-Inn*, and M. COOPER, at the *Globe*, in *Pater-Noſter-Row*. M.DCC.XLIV.

[Price Stitched, Two Shillings.]

PATENT OFFICE

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THE

THE MODERN HUSBANDMAN,

For the Month of *April.*

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CHAP. I.

Of Sowing Wheat *in* April.

WHY it is too late to ſow Wheat-ſeed in April.— I never knew Wheat ſown in this Month, for all Farmers are of Opinion, that, if Wheat-ſeed is ſown after the Month of *March*, the Crop will not anſwer; and this, becauſe the Heat of the Sun, by the Courſe of the Year, increaſes daily, and thereby impregnates the Earth with that quick Fertility, as to cauſe ſuch late ſown Seed to run ſo faſt into Stalk, as to miſs its Kerning Quality, which is repugnant to the Farmer's Deſign and Intereſt.

The Return of Grain is what we ſow our Seed for; not, but that moſt Husbandmen now entertain a different Notion of Sowing Wheat later than what they did formerly, when it was eſteemed a ridiculous and ſcandalous Neglect, if a Farmer had not green Wheat ſeen in his Fields, by *Michaelmas* Day. But now this Opinion is as much exploded, and to that Degree, that, where a Field of green Wheat is ſeen at *Michaelmas* Time, the People are ready to ſay, ſuch an ignorant Farmer will have a poor Crop of Wheat; and this, by Reaſon, if a mild Winter and Spring ſhould ſucceed, the Wheat would run Winter-proud: That is, it would grow ſo early rank, as to ſpend its Strength of Growth too ſoon, and then, when in the Spring-time, bleak Winds, nipping Froſts, and Chills of Wett attack the Roots of Wheat, they have not Vigour and Strength enough left to withſtand the Severity of their Power; and then the Conſequence is, that ſuch forward ſown Wheat ſhews its Weakneſs by the yellow and dying Blades, and where it happens, that Wheat is thus killed, by ſo much is the Crop damaged; a Damage that is often ſeen in the Grounds of an injudicious Farmer, eſpecially where the Wheat-ſeed is ſown ſo early in a dry warm Soil. This is one Sort of extreme Miſtake, that ſeldom ever falls to the Lot of a Vale-Farmer, but often to a *Chilturn* Farmer, by Means of his occupying Variety of Soils in incloſed Fields, where he can act as he pleaſes; and therefore it is, that we ſee here more different Sorts of Operations in Huſbandry, than in Vales, where each Farmer commonly plows and ſows his Ground at the ſame Time his next Neighbour does his, as they lie in open Fields together; and it is therefore that theſe Vale-Farmers are leſs ſubject to be miſtaken in the Time of ſowing their Wheat-ſeed, than *Chilturn* Farmers are; but there

there are other Reaſons that expoſe *Chilturn* Farmers to be miſtaken in the Sowing Wheat-ſeed, for, as theſe ſow Turneps, Rapes, artificial Graſſes, *&c.* they are obliged ſometimes to feed them off late, and thus are tempted to ſow Wheat late; and herein very much conſiſts the Ingenuity of a *Chilturn* Farmer, for, if he cannot make a right Judgment of the Nature of his Soil, he cannot rightly time the Sowing of Wheat-ſeed: As for Example, if he ſhould ſow a wet, flat, ſtiff Piece of Turnep-ground ſo late, as after *Chriſtmas*, he very likely would loſe his Crop by it: On the Contrary, if he ſhould ſow (as I ſaid) a dry warm Soil too ſoon, he may likewiſe loſe his Crop by it. Hence it is, that printed public Accounts, of the Nature of Soils, are perfectly neceſſary to be known by thoſe who are young Practitioners in Huſbandry, and thoſe of riper Years, that have gone on in a wrong Way of Farming, by Sowing Wheat-ſeed in diſagreeable Soils, or at a wrong Time of the Year; though it muſt be confeſſed, that, under the beſt of Judgment, Farming is a Lottery; but much more ſo, when it is carried on by ignorant or unexperienced Perſons, who therefore ſtand in the greateſt Need of being informed of the more profitable Practice of thoſe many Farmers who know much better than they do, as I have, in my ſeveral Monthly Books, given an Account of.

CHAP. II.

Of Barley, Oats, *blue* Peaſe, *&c.*

OF Sowing Barley, white Oats, and blue Peaſe. This early Spring Month, *April*, is not ſo late a one, as to deprive the Farmer of ſowing ſeveral Sorts of Field Seeds. This Month gives the Farmer,

who is Maſter of a proper Soil and Incloſure, an Opportunity to diſplay his Ingenuity, in ſowing therein a proper Seed; and, in order to do this, I ſhall endeavour to ſhew the Practice of other Farmers, that have acted in this Reſpect before them, and by this Means make known the dark and bright Side of their Management; for Treading the Paths that others have made by repeated Trials, and found it the ſureſt and moſt ſucceſsful Way of Proceeding, may ſave, in a great Degree, the Riſque of a Perſon's deceiving himſelf by taking wrong Meaſures. Happy, therefore, is he who follows the Practice of thoſe who have by repeated Trials found their Experiments to anſwer, in the moſt ſucceſsful and profitable Manner.

The Management of a bad Farmer who was poſſeſſed of a proper Soil, and yet ſowed no Barley.—— This Farmer rented an incloſed Farm in a *Chilturn* Country, where his Soil was chiefly a clean Loam, not too wet nor too dry, for which he paid ten Shillings an Acre a Year, for eighty Acres, but had no Common to keep a Flock of Sheep on to fold, and therefore he kept about forty Ewes, for Breeding only; which diſcouraged him from Sowing Barley, and cauſed him to ſow only Wheat, Peaſe, and Oats. Now this Farmer put himſelf to the Charge of digging Chalk, which he could do almoſt in any Part of his Ground, and laid it on his Loams, that it did ſome Service to: But alas! Chalk alone will not do; for, though it is a dry, ſhort, ſweet Dreſſing, yet it wants the moſt neceſſary Quality of all others, and that is the fertile one; for which Reaſon, a judicious Farmer adds Dung to it in one Shape or other, as knowing that Chalk alone is of a poor Nature: However, this Farmer, by making Uſe of no other Dreſſing, than what his Stable, Hog-ſtye, Cow-houſe, and Hen-houſe returned him, had not enough to ſpare to aſſiſt a Barley-

ley-Crop, nor would he be at five Pounds Charge of buying Soot, Lime, Horn-ſhavings, Woollen Rags, or Malt-duſt, *&c.* once in a Year, to get ſix or eight Acres of good Barley, and thereby loſt a profitable Opportunity; for, without a fine Tilth, and good Dreſſing beſides, it is a Folly to ſow Barley. Now as this Farmer lived but twenty-ſix Miles from *London*, he might (as many do that live further off than he) have Variety of Manures for this Purpoſe; for it ſometimes happens, that a Barley-Crop pays a Farmer more than a Wheat-Crop, becauſe, when Wheat, by the extreme Inclemency of Winter Weather, is hurt and damaged, a Barley-Crop, that is ſown at a ſafer Time of Year, may anſwer far beyond it, as it happened in the Year 1740; for had not the Barley-Crop ſucceeded in that Time, better than the Wheat-Crop, there had been a moſt lamentable Famine, indeed; but, as it happened, the Plenty of Barley helped out with the Scarcity of Wheat, and gave many poor Families an Opportunity to live, that would otherwiſe have been ſtarved. From all which I would obſerve and infer, that it is a great Loſs to let ſuch a Farm be without a Barley-Crop; not only for the direct Profit, that it produces beyond Oat or Pea-Crops, but alſo for the Benefit of giving the Earth a Change of Seed, which is of vaſt Conſequence to a Farmer, becauſe there is no Ground whatſoever but affects this Piece of Huſbandry. And whoever does not practiſe it, will be his own Enemy. In the Vale of *Ayleſbury*, as I have remarked in my former Works, their Farmers, ſome Years ago, thought themſelves abſolutely in the Right of it, when they ſowed their blue Clay, and ſtiff, wettiſh, black Loams, with only Wheat and Horſe-beans; but ſince ſome of them have ſown Barley, by Way of Change of Seed, they have found their Account in it, and been convinced that

that Change of Seed is one very great Means to come by plentiful Crops of Corn.

The Management of a Farmer, who, by Reaſon of a bad Soil that he rented, was diſcouraged from ſowing Barley.—This Farmer, like many others in the World, rented a Farm in the *Chilturn* Country that lay about Twenty-ſix Miles from *London*, whoſe Soil, for the greateſt Part, was a red, ſtiff, ſtony Clay, mixed with a Loam, ſo that it might be called a clayey Loam, and, like the yellow Clay, is of the moſt hungry, cold, and worſt Sort of Clays. In this Soil there have been ſeveral Attempts made to get Crops of Barley, and to this Purpoſe neither repeated Plowings were wanting to get the Ground into a fine Tilth, nor Manure, or Dung, to fertiliſe it. But, notwithſtanding all requiſite Preparations were made Uſe of, for obtaining good Crops of Barley, the Farmer was diſcouraged from making further Trials, becauſe of the ſeveral fatal Accidents that attend Barley-ſeed ſown in ſuch a Soil. If a long dry Time directly ſucceeds the Sowing, then ſuch a Clay forms a cruſty Surface and hinders the infant Barley-blades from making their Way into the Air; and, if a wet, cold Time ſucceeds, then the Chilneſs of the Weather, joining the cold Nature of the Clay, ſtarves the Barley, makes it look reddiſh, inſtead of a deep green Colour, and cauſes it to pine till great Part of it dies away; ſo that this, and his neighbouring Farmers, who occupy the ſame Sort of clayey Soil, have been ſo diſcouraged from ſowing Barley, that they have forborne any farther Attempt. This engages my Pen to repeat what I have formerly made appear, *viz.*

How, by Vertue of Steeping Barley-Seed, a red or yellow clayey Soil, that lies tolerably dry, may be ſafely ſown with Barley-ſeed to great Profit.—The before-

fore-mentioned Farmers are well known, for ſeveral Miles round about them, to be good Managers, and very expert in the Art of Plowing, Sowing, and in moſt other Branches of the excellent Art of Agriculture; yet, to my certain Knowledge, they act as ignorantly, in Reſpect of giving Ear to any new Improvement, as if they lived in *Africa*; for I have told ſome of them how they might get good Crops of this Grain in their clayey Soils, by ſteeping the Seed, but it proved to no more Purpoſe than Whiſtling to the Air; however, it had another Effect upon the Gentleman I gave an Account of in laſt Month; one that rented about Three-hundred Acres of Arable and Meadow-ground, moſt of which was a ſtiff, flat, wettiſh, clayey Loam, wherein he ſeldom, by the common Way of ſowing his Barley-ſeed dry, got above Three-quarters of Barley on each Acre; but by taking my Advice, and looking ſtrictly after the Management of Infuſing the Seed according to my *Nitre-Receipt*, he got ſix Quarters of Barly off an Acre, as he himſelf declared to me; a Quantity, as I was informed, never got off ſuch a Soil before. So theſe Farmers, I have juſt wrote of, may, by the ſame Rule, get good Crops of Barly off their red clayey Loams, if they would be perſuaded to Reaſon, and take the ſame Method this Gentleman did, to ſteep their Barley-ſeed according to my public Receipt; for, by this Means, the Barley would forthwith puſh up its Blades before any dry Weather could have Time to cruſh the Surface and ſpoil the Crop, which leads me to make my intended Obſervations.

Of the Benefit of ſowing Barley-ſeed late.— This may ſeem a Paradox to many, but I hope to make it obvious, that there is a Neceſſity for ſowing Barley-ſeed ſo late as in *April*, and likewiſe a Safety in doing the ſame to a great Advantage.

Firſt,

Firſt, then, I am to ſhew that there is a Neceſſity ſometimes, for a Farmer, to ſow his Barley-ſeed ſo late as in *April*. In this Caſe, the Vale Farmer, who occupies a ſtiff clayey Soil, or a wet, ſtiff, loamy Soil, that lies in the Ridge-form in open Fields, is not here meant to be the Perſon I write of, that is under a Neceſſity of ſowing his Barley late; no, theſe have no Occaſion to be under ſuch a Neceſſity, becauſe, as they ſow no Clover, Turneps, nor Rapes, they are at Liberty to ſow their Ground as early as they pleaſe; but it is not ſo with many of the *Chilturn* Farmers, who ſow Clover, Turneps, Rapes, and Rye for feeding Sheep and other Cattle in the Winter and Spring-ſeaſons. Theſe, I ſay, are thoſe who are ſometimes under a Neceſſity of ſowing their Ground late with Barley-ſeed. For Example, I have a reſerved Field of Turneps, which I ſowed late, in order to have them young and tender in *March*, for feeding my Sheep and Lambs on them, till either my Rapes or Rye is fit to turn them into; which would happen, as I will ſuppoſe, at the Beginning of *April*, and that they will eat the Rapes or Rye off in a Month. Now, if ſuch Ground is fit for Barley, it may be enjoyed to great Profit, by Means of ſteeping the Barley-ſeed in Liquor, and liming it afterwards, *&c.* for, in this Caſe, here are two aſſiſting Properties given the Seed; that of the Sheeps-dung, and thus preparing the Seed in the greateſt Safety; for, in the ſecond Place, the Seed, by being infuſed the appointed Time, will ſprout out in a few Days, and, as the Heat of the Weather increaſes with the Length of Days, it will grow a-pace, and become a ſhady Cover to its Roots, that by this Means will grow ſo vigorous, as to withſtand Heats and Droughts for Months together, till, at laſt, if the Ground was in good Order at Sowing-time, a large Crop may be

be expected very early: Whereas, if ſuch Land was ſown ſo late with only naked dry Seed, and a Courſe of dry hot Weather ſhould follow directly, ſuch Seed may lie in the Earth a great While before it ſhews its green Blades; and when it does, they may, very likely, grow into ſeveral Degrees of Ripeneſs, and then what muſt be the Malt that is made from ſuch Barley? Why, perhaps, there will not half of it be true Malt, and then, I am ſure, the Buyer of it muſt greatly ſuffer in large Quantities; for, I am certain, in ſome Summers, there have been Ten-thouſand Quarters of Barley in this Condition, when the Seed has been ſown in the old wrong Way of doing it, as moſt is done at this Time throughout *England*; for, who will believe that three Buſhels of Barley-ſeed will ſurely (with the Bleſſing of Heaven) produce ſeven Quarters at Harveſt, if the Earth was well manured and in a fine Tilth at Sowing-Time, although ſowed ſo late as in *April?* But it is certainly true that it will not only produce this Quantity, but likewiſe that Barley of an equal Growth, provided the Seed was infuſed accordingly. But this Product would aſſuredly happen with the greater Safety, and to the greater Profit, if the Seed was bought from off the ſandy Loams of *Chelſea*, *Fulham*, or *Hammerſmith* in *Middleſex*, as I ſhall farther take Notice of.

Why a Barley-ſeed is more profitable to ſow in a ſtiff Earth that comes off a ſandy Loam, than any other Barley-ſeed.—The Change of Seed is of ſuch Importance towards improving Crops of Grain produced by it, that many ſend for Wheat, Barley, Peaſe, *&c.* to great Diſtances. For this Purpoſe, there are many Sacks of Wheat carried out of *Hertford* and *Bedfordſhire* into *Northampton*, *Leiceſter*, and *Darbyſhire*, for the Sake of ſowing a Seed that comes off a chalky Soil, in a clayey or ſtiff loamy Soil; ſo the *Hertfordſhire* Farmers,

ſeveral of them, ſend for *Fulham* Barley-ſeed above thirty Miles an End, and all by Land-carriage. Now, though we have ſandy, chalky, and gravelly Lands juſt by Home, yet, we of *Little-Gaddeſden* chuſe to be at the extraordinary Charge of ſending for this *Fulham* Barley-ſeed, though we live Thirty-four Miles from it, and find our Account in ſo doing; for as we ſow it in our ſtiff Loams, from off a ſandy ſhort Loam, it returns us a very early Crop, with a Kernel much bigger than that we ſowed, and is ſo natural for making true Malt, that it is commonly ſold for two Shillings a Quarter more than our common Barley is; but there are other Reaſons for our preferring this *Fulham* Barley-ſeed before all others. One is, that by getting a Crop of ſuch Barley, ſooner than ordinary, off the Ground, it gives a Farmer the Opportunity to ſow the ſame Land with Turneps, early enough to enjoy a full Crop of them. Another Reaſon is, that we can (if the Land is proper for it) ſow Rape-ſeed. A third is, that, by mowing off ſuch a very early Crop, we have an Opportunity to plow the Ground ſeveral Times, for ſowing Wheat in the ſame in *October* following. Another is, that, this Barley being ripe before Wheat, it may be very probably got into the Barn in the drieſt Order, as theirs about *Fulham* commonly is, who thereby are Maſters of the beſt of Barley-ſeed. And it is this excellent Quality that makes it a fit Sort to be ſown in the *Northern* Parts of this Kingdom, becauſe this Barley-ſeed, beyond all others, may, as I have obſerved, be ſown late and mown early. In ſhort, there are theſe two great Conveniencies attending this peculiar Sort of Barley; one is, that, by ſteeping the Seed, a Farmer is out of the Danger of having his Barley-crop ſuffer, by Dryneſs of Weather, although the Seed be ſown in any Time of this Month of *April*, in a dry Soil. The other is, that, notwithſtanding

ſuch

ſuch late Sowing, the Crop, produced from the Seed of this *Fulham* Barley, will be ripe as ſoon, if not ſooner than the Wheat-crop. Now to have this *Fulham* Barley-ſeed in many Parts of *England*, *Wales*, and *Scotland*, it may be eaſily and very cheaply ſent by Water-carriage, becauſe ſeveral of the Farmers, who ſave and ſell this Barley-Seed, live very near the River *Thames*, ſo that there will be little or no Charge to carry it to the Boat; and, as it is then on the Water, it need not be off it, till it is put on Ship-board, and unladen at the deſired Port. But there muſt be a great deal of Care employed in examining the Seed, for there is, ſometimes, a conſiderable Difference in it; ſome may have the Seeds of Weeds among it; others may have thoſe light Kernels mingled with it, that ſhould have been ſeparated from the Seed: For, if there are many of theſe, the Crop will be a great deal the worſe for it; for, as the Seed is, ſo will the Crop be in a great Meaſure; therefore, if a Gentleman will be at the Charge of it, I will take the ſmall Kernels from the large ones, and then the Seed will be in the greateſt Order for Sowing, and produce large Ears and large Kernels, that conſequently will make the beſt of Malt. Now to have ſuch Barley-ſeed in this high Perfection, after the *Fulham* Farmer has ſcreened and ſieved it ready for ſelling it for good Seed, I come with the ſmall Tool I gave an Account of in *March*, and diſcharge the Seed of thoſe light ſmall Kernels, that would produce light ſmall Barley-corns again, if they are ſown; but then there muſt be an Allowance made, for the Loſs of ſuch light Kernels, which, after they are thus ſeparated from the heavy and larger ones, will be only fit for the Swine or Poultry. But this is not all the Skill that is required of a Buyer of this Seed; the Barley, by being got in damp, may ſo heat in the Mow, that the Seed will not grow

to Profit: In this Caſe the Sower will loſe his Money, Time, and Labour; and it is on theſe Accounts that I buy my *Fulham* Barley-ſeed of one or two particular Men, that I know ſpare no Coſt nor Pains, but are more than ordinary curious in the Saving of it; and, for this Reaſon, it is true they have the greater Price for it; but then no Perſon ought to grudge a Shilling or two extraordinary in every Quarter for ſuch a delicate Sort of Seed; becauſe a Shilling, kept back on this Account, may occaſion the Loſs of many Crowns in a large Crop of Barley. This moſt excellent Barley-ſeed I furniſh to any Perſon on a proper Order; and, as I have ſometimes Commiſſions for this Seed, I here give Notice, that it will be to no Purpoſe for any Perſon to ſend an Order to me for it, after the Month of *February*, becauſe it is commonly all ſold off before *March*; and therefore the moſt proper Time, to ſend for this Seed, is between *New-Year's-Day* and the latter End of *February* at fartheſt. And if Gentlemen who live in ſuch convenient Parts, where this Barley may be ſent them, by Water-carriage; or by Land, if the Carriage is not too long and expenſive; I ſay, if Thouſands were but ſenſible of the great Improvement that may be made in Barley-crops, and in making Malt, by Means of their ſowing this *Fulham* Barley-ſeed, I am almoſt ſure they would ſtrenuouſly endeavour to have a Quantity of it ſent them every third Year; for this Barley-ſeed will laſt two Crops, at leaſt, without degenerating; but, if ſown longer, it will grow worſe, and at laſt become the ſame Sort of common Barley that is natural to the Country.

Of Preparing Barley-ſeed for Sowing. — This is more than ordinary neceſſary to be done, whether it be in the Uſe of rath ripe *Fulham* Barley-ſeed, the flat-eared Sprat Barley, or the famous and moſt profitable Barley-ſeed of all others whatſoever, the *Turky* Barley, which, when out of its

its Ear, can hardly be known from a large-bodied Wheat Kernel, though in its Ear it grows bearded like common Barley, as I have been an Eye-witneſs of. I ſay, when either of theſe are to be ſown, the Seed ſhould be firſt ſteeped in ſome fertile *Menſtruum*, to prevent the ſeveral Miſchiefs and Loſſes that attend the Sowing of dry Seeds in this Month of *April*, which ſuch a late Seaſon ſubjects the Seed to; for, in Caſe a long dry Time ſhould directly follow the Mowing of Barley in the common naked Way of Sowing it, the Seed will lie almoſt unactive in the Ground, and ſome of it, very likely, canker, corrupt, and die; or, for Want of Moiſture, its ſtunted puny Blades will make ſo ſlow a Growth, as to give the Worm an Opportunity to eat and kill it; or, if it does ſurmount theſe two Diſaſters, at Harveſt there will certainly be two, if not three Sorts of Ripeneſs in the Barley-crop, if the Seed had not received Rain enough in due Time to cauſe the Roots to throw up an even Growth of Barley. Now the ill Conſequence of all this is abſolutely prevented, by ſteeping the Barley-ſeed according to my Salt-petre Receipt; which, as it has been publiſhed in one or more of theſe Monthly Books, I ſhall forbear Writing here, and add, that as there are ſeveral other Liquors for ſteeping Barley-ſeed in, preparatory for fertiliſing and inſuring a good Crop, I ſhould have mentioned them before; but, as I intend to furniſh the World with more Works on the great Subject of Agriculture, I ſhall defer them with a thouſand others for more convenient Opportunities; which Article of ſteeping Barley-ſeed will be of the greater Importance, when I make known more than one Way of doing it much cheaper than with Salt-petre; for I am very ſenſible, that Farmers reject the very Name of a new Improvement, when the Charge of a few Shillings is tacked to it; as, indeed, the Caſe is in this Reſpect, when Salt-petre

ſells for a Shilling or more a Pound, as it has done of late, by Reaſon of the great Conſumption of it in the making of Gunpowder this War Time. But as my other Receipts for the imbibing of Barley-ſeed will be as cheap, as Salt-petre is dear, I hope I ſhall give the Public the greater Satisfaction, when I expoſe them to the World.

Of Sowing Barley-ſeed. — As to the Sowing of Barley-ſeed, I have in laſt Month given an Account of it, and therefore have the leſs to ſay here; ſome Perſons I know there are, who ſcruple the Sowing of rath-ripe, or *Fulham* Barley-ſeed in wettiſh or ſtiffiſh Earths, becauſe they know it grew in the *Southern* Part of this Nation in a dry, warm, rich Soil, as thinking it too tender for their Ground and Situation: And, indeed, I am of Opinion they are in the right of it, on the Suppoſition that they know of no better Way of Sowing than after the old Mode, which obliges all Farmers to ſow Barley-ſeed dry, and before the Month of *April*. But the Caſe is altered, becauſe there are a Thouſand new Improvements found out and practiſed now, that never were known before; and, among the reſt, this is one, of ſowing Barley ſo late as in *April* with Safety, by the Means of liquoring the Seed, and liming it afterwards, which fits it for ſo ſpeedy a Growth, that let the Land be ever ſo dry, when it is ſown, and if there is no Rain for Months afterwards, ſtill the ſoaked Barley-ſeed, by carrying Liquor enough with it into the Earth, will ſtrike an expeditious Root, and throw up a moſt quick Blade, to the Carrying on its Growth in a flouriſhing Condition till Harveſt. Therefore even the Vale-Farmer need not be afraid of Sowing *Fulham* Barley-ſeed, nor any other ſo late as in *April*, notwithſtanding the great Diſcouragement that a clayey Soil brings many of them under, even to a Dilemma, becauſe, ſay they, if we ſow our Barley-ſeed here too ſoon, the Chills of Froſts and Wetts will

ſpoil

ſpoil it; and if we ſow it ſo late, why then the ſtiff Surface will bind ſo faſt (if a dry Time preſently ſucceeds the Sowing) that they will be in Danger of loſing their Crop by it. Now, to avoid the Damage that attends theſe two Extreams, Soaking the Seed will be an abſolute Prevention to it, and Sowing the ſame in *April*, which I know many of them will not believe; but let any of them but try a half Acre Ridge-land firſt, and, as that fares, let them deſiſt, or go on hereafter with the ſame Practice. This is as fair a Plan as can be well propoſed; and, if they will keep up to the Punctilio of my Nitre Receipt, I will venture my Reputation on the Succeſs: For we try and prove the *Fulham* Barley at above thirty Miles to the *Northward* of *London*; and that in ſtiff, wettiſh, flat, *Chilturn* loamy incloſed Fields, and ſeldom ever find it fail our Expectation; and, if ſo, I am ſure it ought to be an Encouragement to Thouſands of others, for their Sowing of this, or any other Barley-ſeed thus, and ſo late as in *April*, in a ſtiff Earth.

A Caſe ſhewing how a large Field was ſown with Barley in a wrong Manner, and how the Farmer loſt moſt of his Crop by it. — As I have juſt now been writing on the great Benefit of ſowing Barley-ſeed wet, it comes in my Way to give an Account of a particular Caſe that occurred to my Knowledge on a Journey I took in *October* 1743, when being on the Road, I accidently fell in Company with a Farmer of the Country I was then in, who, coming againſt a large incloſed Field of the gravelly Kind, told me the Farmer had plowed the Ground ſufficiently fine for the Reception of the Barley-ſeed, but had hardly his Seed again at Harveſt. Upon his telling me this, I deſired him to give me his Reaſons why the Barley-crop miſſed. His Anſwer was, firſt, that though he had plowed his Ground fine enough, it had not a Dreſſing beſtow-

upon it capable of nouriſhing a full Crop of Barley;

Barley; ſo that that, which was given the Ground, did little or no Good; becauſe, ſecondly, there happened to follow a long dry Time preſently after the Seed was ſown; and, though there fell a little Rain, ſufficient to cauſe the Seed to ſprout and grow up ſome Heighth, yet, for Want of more Moiſture to carry forward its Growth, the Crop began to pine, and the more by Reaſon of the natural Dryneſs and Heat of the gravelly Ground, and the hungry Quality that always attends its looſe Parts; inſomuch that moſt of the firſt Shoots of the Barley withered and were dying away, when, ſome Showers of Rain falling, they ſo refreſhed and enlivened the Barley Roots, that they puſhed up new Shoots, that grew into ſeveral weak Stalks, and unequal very poor Ears, that had not Time to perfect their Kernels; becauſe, by theſe After-ſhoots, great Part of the Field of Barley became a Sort of ſecond, but untimely and abortive Crop; ſo that, at Harveſt, the upright and ripe Ears made a thin and very poor Appearance to the Sight of paſſing Travellers, but worſt of all to the ignorant Farmer and Owner, who I have Reaſon to believe, if he was told, before the Sowing of this Field with Barley-ſeed, he would run ſuch a Riſque of having it ſpoiled by dry Weather, if he did not firſt ſoak it in a proper Liquor; that he had better give two Shillings for a Receipt, and thereby be taught how to ſteep the Seed, and prevent the Misfortune: I hardly ſuppoſe he would beſtow ſo much Money, nor half that Sum for it. On the contrary, it would be more likely he would reject it, if it was given him only for Good-will, and, perhaps, add a ſcorning Flout or Jeer againſt all new Ways, as believing none can exceed the old ones. I have met with ſome of theſe obſtinate Blades in my Travels, that were not only Farmers, but Men of ſomewhat a higher Rank, who, becauſe they have read ſome uſeleſs, vamped up, falſe old Theory, perhaps, cal-

calculated at firſt for a different Climate to this of *England*, and wrote by Authors not capable of judging of their Truth or Falſhood, and ſo have ſent them into the World a ſecond Time, right or wrong, to the ſcandal of the greateſt and beſt natural Subject that can be written on; and this, becauſe they have not had a Practice, for a ſeries of Years, in the Art of Agriculture, which is the chief Means that could qualify them for making a better Diſtinction and Judgment of what they wrote; which puts me in Mind of two Gentlemen, who took a great deal of Pains to prove me a Lyar, or a Writer of Truth.

How two Gentleman travelled a hundred Miles to prove this Author a true or falſe Writer. — This was told me from one who lived on the Spot at *Barley-End*, in *Buckinghamſhire:* That two Gentlemen had rode fifty Miles an End to ſatisfy their Curioſity, if it was true, what I mentioned in one of my Books of *Husbandry*, that Trefoil and Clover-graſſes grew together on a chalky Soil in this Part of the Country. The Perſon's Anſwer was, that, if they would ride a little farther, he would ſhew them the Field where they were ſown, and now are to be ſeen. The Gentlemen went; and, when they had received ocular Demonſtration of the Fact, one of them ſaid, *I find all is not Lyes that is written*; which leads me to obſerve, that theſe Gentlemen were in the Right of it to divert themſelves with a Ride, to prove the Truth of an Aſſertion of this Kind, becauſe, if they were Owners of ſuch a Soil, they might with the more Aſſurance venture to ſow theſe Graſs ſeeds in the ſame, for Seeing is Believing. But, if they had lived at a much greater Diſtance, they might have ſaved themſelves the Coſt and Pains of a long Journey, by being more credulous, and have taken my Word for the Truth of it; for I muſt be a very audacious Writer, in-

deed, if I had ventured my Reputation on a falſe Bottom in this Reſpect, by directing any Perſon to a Place within two Miles of my Houſe, to prove the Truth of what I aſſerted for Fact: However, I hope it is to a good Purpoſe, I did ſo, for by this Caſe many may be informed, that Clover and Trefoil will grow extraordinary well together, for two Years, in a chalky Soil, that lies flattiſh, and is of a moiſt Nature; but they ought not to expect this Succeſs where a Chalk is too much of a hurlucky or ſtrong Nature, for then it will not adminiſter a ſufficient Quantity of Moiſture, in dry Seaſons, to nouriſh the Graſs to any great Perfection; but, where a Chalk is agreeable, the Trefoil is very proper to grow along with the Clover, becauſe it is a branching cloſe-headed Graſs, that is therefore the more capable to ſhade the Roots of the Clover and forward its Growth in dry Summers. But to return to my former Subject, of the Farmer that loſt moſt of his Crop of Barley by wrong Management: I ſay, if this Farmer had ſteeped his Barley-ſeed, according to my Salt-Petre Receipt; inſtead of having ſo little Return at Harveſt, he might very probably have had four or more Quarters on every Acre, notwithſtanding the long dry Time that ſucceeded the Sowing of his Seed; and, had he but ſufficiently dreſſed his Ground, I think there had been no Danger of his having ſeven Quarters on each Acre: However, that I may be within Compaſs of the Matter, I will ſuppoſe he only loſt three Quarters of Barley on each Acre, purely for Want of ſteeping the Barley-ſeed, that would have coſt him not above three or four Shillings, at moſt, for preparing ſo much as would have compleatly done the firſt Acre, and leſs for the reſt; then, what a Loſer he muſt be, I leave for my Reader to judge.

Of Sowing Barley-ſeed by the Drill-plough.— In this

this Month the Drill-plough comes in as a very ſerviceable Inſtrument, for Sowing of Barley-ſeed; becauſe, as the Weather is got warm, and like to be more ſo every Day, the Seed, by being drilled in, lies deeper and ſecurer in the Ground, than that only harrowed in, from the Power of Heats, and Damage of too great and long Droughts, which ſometimes hinder a Farmer of almoſt half his Crop of Barley, ſown in the Broad-caſt Way: And therefore it is now in frequent Practice with ſeveral Farmers, to ſow Barley out of the Hopper of a Drill-plough, at a Foot, or ſix Inches aſunder, in Drills or Rows. If at a Foot Diſtance, the *Dutch* Hand-hough muſt be afterwards employed, to keep the Intervals clean from Weeds, to help this Barley-Crop, and for ſowing them the next Seaſon with Wheat, Barley, or other Grain; gravelly, chalky, ſandy, and dry Loams are vaſtly improved by this Means, and will, with little or no Dreſſing, return plentiful Crops of this Corn; and, as theſe Soils are not ſo proper for Wheat as Barley, they may be ſown Year after Year with Barley, by this Means of Drilling in the Seed, which would grow into the greater Crop, if it was firſt ſoaked and limed in a proper Liquor. There were many poor gravelly Fields ſowed with Barley, by the Drill-plough, this laſt Year 1743; and, although the former Part of the Summer was attended with very dry Weather, yet the Barley grew in fine Crops; or the Barley-ſeed may be ſown by the Three-wheel, light, Drill-plough, at ſix Inches Diſtance in Drills, to great Profit, without Houghing, becauſe the Ploughman can ſtraddle the two fore Wheels, wider or narrower, to a Farmer's great Conveniency; which is one great Perfection of this Sort of Drill-plough, for, by it, a Perſon may ſow his Seed in as cloſe, or in as diſtant Drills, as he thinks fit.

CHAP. III.

Of Dreſſing and Manuring the Ground for Barley-*Crops.*

THE Neceſſity of Dreſſing or Manuring Ground, for fertiliſing Barley-Crops.— As Barley is a Grain that cannot well grow too thick, it requires a more than ordinary Aſſiſtance, to ſupport its Crop, eſpecially when it is ſown in the old dry Way; for, when the Seed is not firſt liquored, nor the Ground dreſſed or manured, there is little Hopes of a good Crop. Wheat, and moſt other Grain, will proſper with leſs Dung or Manure than Barley will; from hence it is, that many Farmers have fallen into the Miſtake of ſowing a great deal of Ground with Barley-ſeed, and been at the Charge of half dreſſing it, in Hopes that, with the Help of a kind, warm, rainy Time, they may enjoy a plentiful Crop: But alas! many have deceived themſelves on this Account, and been convinced by lamentable Experience that, had they ſown but five Acres, where they did ten, and put all the Dung on the firſt, that they did on the laſt, they would have had a greater Return at Harveſt. What a Loſs then muſt this be, enough to break a ſlender-pocketed Farmer, who ventures to ſow twenty or thirty Acres of Ground with Barley, under a half Dreſſing, and with dry Seed? And eſpecially one that rents a Vale-Farm, becauſe, if he neither prepares the Seed, nor the Ground, it is great odds, if his Barley-Crop is not ſpoiled by two Extreams of Weather; one is, that, in Caſe a very dry Summer ſucceeds, their ſtiff bluiſh, or black clayey, or marly Soils will crack and ſtunt the Growth of the Barley-Crop; and, if a very wet, cold one happens, the Waters may ſtunt or kill a great

great deal of that Barley, which grows near the Water-thoroughs; a Caſe well known to the Coſt and Damage, ſometimes, of Thouſands of Vale-Farmers, who, by the laſt Means, have little elſe to mow beſides that Barley which grows on the Ridge Part of their Acre and half Acre Lands. Now, to prevent theſe fatal Diſaſters in a great Meaſure, liquoring the Barley-Seed, and well dunging or manuring the Land, is abſolutely neceſſary for obtaining a full Crop of this univerſal Grain, by enabling the Seed to make an expeditious firſt Growth, in order to bring on an early Head to cover and ſhade the Roots, againſt the Violence and Damage of too great Heats and Droughts, and withſtand the Chills of Inundations of Waters, that frequently happen in the low Situations of Vale Grounds, and ſtagnate the Roots of the Barley, as many of the Hill Farmers are Eye-witneſſes of, when they behold Vale Lands almoſt covered with Water, that appear like Part of a Sea.

Of Dreſſing and Manuring Vale Grounds for a Barley-Crop.— I have known Vale-Farmers, for the foregoing Reaſons, pen their Sheep twice on the ſame Land, or what may be called *double Dreſſing* it: Others will caſt Dung firſt, and then fold on the ſame Ground; others will only manure their Barley Land with Pigeons-Dung, as the beſt of Dreſſing for it; and, of late, I know one, and only one, Vale-Farmer manure his Barley-Crop with Soot, and, I was a Witneſs, it did great Service, though not ſo much as if he had made Uſe of a ſufficient Quantity of Soot; but this he did not do, his Quantity I think was no more than fifteen Buſhels to an Acre, which he ſowed over the ſprouting Barley, juſt as its green Blades appeared above Ground; whereas, had he ſown ten Buſhels on every half Acre Ridge Land, he had compleatly manured all the Barley Ground. However, the Soot he made Uſe of did him a great deal of Service, in the wet cold

Spring

Spring Time of 1738: By which Trial I am convinced that Coal Soot is very proper to aſſiſt Barley-Crops in Vales, contrary to the received ſtaunch Opinion, ſo long entertained by theſe Farmers, who always, as far as I can learn, held it a loſt Attempt to make Uſe of Soot for aſſiſting their Crops of Corn, as believing their wet cold Land would draw the Vertue of it in too ſoon, and the ſooner, if great Rains fell preſently after it was ſown; and, if a very dry hot Seaſon preſently followed, then they believed the Soot would help to burn up, inſtead of nouriſhing the Corn. But, as I ſaid, Experience ſhews that Soot agrees extraordinary well with Barley, ſown on Ridge Vale Lands; and ſo it does, with ſeveral Sorts of Soils in the *Chilturn* Country.

Of Dreſſing and Manuring Chilturn *Lands, for fertiliſing Crops of Barley.*— The vaſt Quantities of Manure that are yearly fetched from *London*, and conſumed in *Hertfordſhire*, for fertiliſing Crops of Corn and Graſſes, prove, that it does conſiderable Service to *Chilturn* Farmers; for improving our Barley-Crops, we make Uſe of Soot, Rags, Ivory-ſhavings, Cows and Hogs Hair, Rabbits, Hens, and Pigeons Dungs, Trotters, Hooves, Sprats, Malt-duſt, *&c.* for, as our Lands are not ſo marly and rich as thoſe in Vales, we are obliged to be at a great Expence for ſuch Aſſiſtance; which is alſo more than ordinary neceſſary as we often, and oftener ſow our Land, than Vale-Men can, as we are incloſed, and they are not; and this we are forced to do in a double Manner, where the Land is a Gravel, a Chalk, or a clayey Loam; therefore we ſow Turneps, Rapes, Clover, Thetches, *French* Wheat, *&c.* to help towards inriching our Grounds; and beſides theſe we frequently add the Fold, or Horn-ſhavings, Stable or Fowl Dungs, or ſome other Sort, or elſe we could not get five, ſix, and ſeven Quarters off an Acre: But, beſides thus aſſiſting Barley-Crops,

Crops, with one or two Dreſſings of Dung and Manure, it is abſolutely neceſſary that we *Chilturn* Farmers be at an extraordinary Charge for ſo doing, becauſe there is another ſecond Crop to partake of its Benefit the next Year; and therefore, we ſay, Two Years Crops lie upon this one Year's Dreſſing; and firſt, if we dreſs Barley with Soot, about a Week or Fortnight after it has been ſown, we ſow twenty Buſhels of it over each Acre; but others think it a better Way to ſow this Quantity of Soot, as ſoon as the Barley-ſeed is ſown, and harrow both in together; and indeed, I have found it the beſt Way, by Reaſon it lies, in this Form of Sowing, cloſer to the Kernels, than when the Barley is ſown firſt, and harrowed in, and the Soot ſown afterwards; nor has the Soot ſo much Power this Way to burn the Blades of the Barley, in Caſe a dry hot Seaſon ſhould follow, as it has when ſown after the Barley is harrowed in; and ſo efficacious is ſuch a Dreſſing of Soot to the Ground, that a Pea-Crop ſowed on the ſame, in the next Spring Seaſon, is hoped for, in a plentiful Manner, and by this Means ſeldom fails the Owner's Expectation. But the Manure of Soot will not anſwer to Profit, if made uſe of in three Sorts of Land, in a looſe light Sand, in Maſh Lands, or in Three or Four-bout Lands; in the Firſt, the Earth is too hollow and ſpongy to retain it long enough on its Surface to aſſiſt the Roots of the Barley; in the Second, the Land lies too flat and wet, to give the ſame Benefit to the Grain; in the Third, the Water-thoroughs are too deep, and the Ridges too narrow, to receive a due Aſſiſtance from ſo light a Body as Soot is; and, when it is waſhed off into theſe Thoroughs, it is in a Manner loſt, becauſe little or no Corns grow here; but, when it is ſown on Barley that is ſown on broader Lands, it will anſwer as I have before obſerved. Secondly, if we dreſs our Barley-Crop with Malt-duſt, we commonly

monly ſow but Twenty-five double Buſhels, or ten Sacks of it over each Acre thus: Out of a Seed-cot, a Man ſows it Broad-caſt, as ſoon as the Barley-Seed is ſown, and harrows in both together; and, if Showers fall in due Seaſon, there is no Fear of a good Crop of Barley; for this is of ſuch an efficacious fertile Nature, that it will mightily aſſiſt the Grain, and add a Benefit in a ſmall Degree to the next Year's ſucceſſive Crop of Peaſe or Oats. But this delicate Manure is more difficult to come by in our Parts of late, than formerly, becauſe a great deal of it is conſumed in feeding dry or fatting Cows, as well as thoſe that give Milk; Horſes that are to be fatted for Market, Working-Horſes, and Swine, inſomuch that it now ſells for one Shilling for every double Buſhel; but there are ſeveral other Uſes, that this Manure may be put to both in Farming and Gardening, that I could name, did it ſuit with my preſent Purpoſe; but, as I am here confined to the Article of *Barley*, I ſhall poſtpone Writing on them, till I publiſh more Works of this Kind. Thirdly, if we dreſs our Barley-Crop with Cart-Dung, it ſhould be of the rotten Sort, becauſe it will the ſooner and better mix with the Seed; and then it may be laid on the Ground, juſt before the laſt Plowing, to be ſpread all over it, and plowed in. When this is done, the next Thing is to ſow the Seed, either on the rough or the ſmooth Ground; on the rough is meant when the Barley is ſown on it as the Plough leaves it: But then it will come in Rows, and be the better haled, or covered from Vermin. Others will harrow once in a Place firſt, and then ſow all their Barley-Seed, and finiſh by twoor three Harrowings afterwards; others will ſow half their Seed on the rough Ground, and when it has been harrowed in, once in a Place, they will ſow the other Half, and harrow it in, twice or thrice long-ways and ſhort-ways, that is to ſay, croſs-

ways;

ways; ſome again will, as ſoon as the Barley is ſown, draw their Cart over the Ground, and lay fifteen, or more, Loads on every Acre, for ſpreading their rotten Dung, with a great deal of Care, that it may cover all the Surface, as near as they can; and indeed, this is a good Way, not only to hinder the Field Fowls, in ſome Manner, from devouring the Kernels, but it will alſo preſerve the Roots very much from the Power of Droughts; if Rains fall in Abundance, they will the better waſh down the Goodneſs of the Dung on the Barley-Roots, and cauſe them to branch and grow into a fine full Crop. Fourthly, if we dreſs our Barley-Crop with the Fold, it muſt be done only in a dry Time, for, if the Fold was to be employed in wet Weather, it would do more Harm than Good, by the Sheep's treading in the Ground ſo hard on the Barley, as to prevent a great deal of it ever coming out: But if the Fold is ſet on the Barley, directly after it is ſown, and the Folding or Penning is carried on in dry Weather, it is the beſt of Dreſſing, for chalky, ſandy, gravelly, and dry loamy Earths; becauſe the Stale and Dung of the Sheep will add ſuch a Fertility to the Barley-Crop, as to make it become a very good one, indeed, for I never knew this Piece of Huſbandry fail its Owners, when carried on in a right Manner; and this may be done for ſome Time, in one and the ſame Field, even till the Barley is three or four Inches high; and, though the Sheep may eat and trample ſome down, yet their Dung and Stale will ſo revive it as to force it on into a moſt quick Growth. This is a common Practice with us in *Hertfordſhire*, and other *Chilturn* dry Countries, and eſpecially, when we ſow our Barley ſo late as in this Month, becauſe now the Heat of the Weather and the ſprouting Spring Graſs, or Clover, or Rye, that was ſown in *Auguſt* laſt, or Turneps that are not all yet eaten off,

will enable the Sheep to dung much, and reſiſt the cold Earth, from its hurting their Bodies; for when Sheep are thus folded ſo early as in *April*, if they are kept on a ſcanty Food, the Earth will be apt to give them the Gripes, or breed the Red-water, and, in this Reſpect, the Loſs may be more than the Profit; therefore, none ought to pretend to fold Sheep on Barley, unleſs they can give them full Belly-fuls, in this Month, of Turneps, Rye, Clover, Hay, or natural Graſs; for, as yet, the Days are ſhort, and the Nights long, and generally wet at this Time of Year, which makes it the more neceſſary, not only to give theſe moſt uſeful Creatures a Belly-ful, but of that Food moſt adequate to their Natures, as Turneps, or Graſs and Hay; the latter, to fix the flaſhy green Meat, and prevent the fatal Effects of too much Humidity; a Quality that is oftentimes the Sheep's Deſtruction, becauſe theſe Creatures, that have the moſt porous Skin or Pelt of all other Animals, are ſubject, not only to ſuffer by the great Quantity of Moiſture or Water they take in at their Mouths, in the Feed of green Vegetables, but alſo by what they receive from Rains, that enter their Bodies, through the large Pores of their ſpongy Skins; for, in ſuch watery and cold Seaſons, that ſometimes happen in this Month, the Sheep are brought under thoſe deſtructive Diſtempers, the Rot, or Red-water; and the more, by the ſudden Sprouting of a Spring, raw, flaſhy, firſt Graſs; but of theſe and many more Incidents, appertaining to theſe moſt uſeful Creatures, I intend to write more particularly of, in a particular Treatiſe for this Purpoſe, different from all others ever yet publiſhed. Fifthly, if we dreſs our Barley-Crop with Rags, it is commonly done when it grows on chalky, gravelly, or ſandy Loams; here the woollen greaſy Rags will do vaſt Service, if they are firſt chopped ſmall, and ſown over all the Land

Broad-

Broad-caſt out of a Seed-cot, and a Man's Hand, and then plowed ſhallow into the Earth; which as ſoon as done with a Foot or Swing-plough, or Jockey-wheel Plough, the Barley-ſeed is to be harrowed in; and, as they are of a hollow ſpongy Nature, the Rags will lodge the Rains and Dews, and become a Sort of Watering-pot to the Roots of the Barley and the Earth about them, and adminiſter ſuch a Moiſture to them in theſe hot dry parching Soils, that the Barley-Crop will grow with great Vigour and Expedition in the hotteſt Summers, and not only be ſerviceable to this firſt Crop of Barley, but will inrich the Ground for two or three Years; at leaſt, the Rags will become a Dreſſing for the next Year's Crop of Peaſe, Oats, Thetches, or Tills; for woollen Manure agrees ſo extremely well with this this Sort of dry Land, that the *Ivinghoe* and *Edgborough* Farmers buy great Quantities of it every Year, ſome from *London*, others from the *North*, out of *Bedford* and *Northamptonſhires*, for thus improving Wheat and Barley-Crops, that grow in their pooreſt chalky Grounds, even where an Acre of ſuch Land is let for Half a Crown a Year; and, unleſs the Farmers are at this extraordinary Charge for a Manure beſides their Fold-dreſſing, it would hardly, in ſome Years, be worth Plowing and Sowing: But I muſt ſtop my Pen here, for, if I was to write on all the Particulars relating to the Improvement of Land, by Dungs and Manures, it would employ a large Treatiſe; and therefore I ſhall proceed to obſerve

The good and bad Properties attending Barley-crops that are top-dreſſed in this Month.— Top-dreſſing of Barley-crops in *April* is a very common Thing, eſpecially in *Chilturn* Countries, becauſe, inſtead of making a Fallow, on Purpoſe for the Reception of Barley-ſeed, we prepare the Ground firſt by a Crop of Turneps, or Rye, or Clover, or

Rapes, or Thetches, or *French* Wheat, *&c.* and by this Means get a Crop extraordinary, more than Vale-Farmers can in their open common Fields, purely for a Crop of Barley, by ſeveral Plowings, that are performed in the Space of very near one Year, before they can ſow their Barley-ſeed. And, where they are obliged to make a regular Fallow, as ſuch Turneps, Rye, or Rapes are fed off by Sheep, they leave ſo much Dung and Stale behind them, as ſerve in Part of a Dreſſing: And, to compleat it, as ſoon as ever the Barley is harrowed in, we either top-dreſs it with ſhort Dung, or with Malt-duſt, or with Soot, or with Peat-aſhes, *&c.* Now, in Caſe a rainy Time preſently ſucceeds the Sowing of the Barley, then the Quinteſſence of ſuch Top-dreſſing waſhes down on the Roots of the Grain, and forces forward a moſt expeditious and vigorous Growth of it, ſo that its early Blades cover and ſhade the Roots againſt the Damage of Droughts as well as the Top-dreſſing itſelf. Thus both the Vertue and Subſtance of it contribute very much to the Perfecting a full Crop of Barley. But, in Caſe a dry, hot, long Seaſon of Weather ſucceed the new-ſown Barley-ſeed, then the Danger is, that ſuch Top-dreſſing does more Harm than Good, by burning up the Blades, or Shoots, of the Barley, and drying its Roots, ſometimes to the Deſtruction of the greateſt Part of the Crop; and the more, as the Barley-ſeed is ſown ſo late as in *April.* Now, the Intent of my writing this Paragraph is, to ſhew and illuſtrate the great Benefit of ſteeping the Barley-ſeed, becauſe it abſolutely prevents all ſuch Damage that may happen to a Barley-crop, by the hot Cover of the Dung, or Manure, and the long Dryneſs of the Weather; for, as the ſteeped Seed carries a deal of Liquor with it into the Earth, it is there reſerved, and becomes a Fund of Moiſture for ſome Time, even to the Forcing on the Growth of the Crop, though

no

no Rain happens for ſeveral Months afterwards; which all will find, as well as I have done, that prepare the Seed according to the Salt-petre Receipt that I have already made public; as to thoſe cheaper ones, I am ready to communicate them to any Perſon for a ſmall Gratuity.

CHAP. IV.

Of White Oats.

THE Conveniency that White Oats give a Farmer of ſowing them in this Month.—The various Natures of Oats contribute very much to a Farmer's Conveniency. The Black Oat is reckoned the hardieſt Oat of all others, and therefore is ſown ſooner than any, and ſo affects an early Sowing in *February*, that that Month is accounted the beſt Month in the whole Year for Sowing it. On the Contrary, a White Oat is of a more tender Nature, and more forward or quicker Growth; which obliges Farmers to ſow them late, even in the Months of *April* or *May*. Now as a White Oat requires a later Sowing than a Black Oat, it gives many *Chilturn* Farmers an advantageous Opportunity to feed their Turneps, their Rye, or their Rapes off late, and yet not be deprived of enjoying a good Crop of Corn at the following Harveſt: For when any of thoſe are fed off by Sheep, Cows, or Oxen, in this or next Month, White Oats may be ſown to a good Purpoſe; and it is by this Means of feeding Turneps, Rye, and Rapes off late, that either rath-ripe Barley, White Oats, or blue, or other tender Peaſe may be ſown in this Month, directly after ſuch a Crop is got off; when it is an unſeaſonable Time to ſow Black Oats, becauſe they will run into Straw or Stalk much,

much, but little into Corn. But White Oats, having a very ſtrong, large, flaggy Stalk and Ear of a great Bigneſs, employ the Fertility of the Earth for nouriſhing theſe its Branches to that Degree, as to hinder its too luxuriant Growth, and prevent the violent Attractions of the Sun's Heat, from leſſening its Multiplying into plentiful Crops of Corn, when the more naked Stalk of Black Oats, if ſown ſo late, would be overcome by them, and be rendered a poor Crop; becauſe the Roots of the White Oat grow under a Sort of Cover or Shade that they receive from the green broad Blades that always accompany their Stalks; which leads me to make Obſervations an that Earth which is moſt proper to ſow White Oats in.

Of the moſt proper Soil for ſowing White Oats in.—Not only the Time of ſowing White Oats is to be obſerved, but the Soil alſo is of the greateſt Importance to be conſidered; for, if this Seed is not ſown in a proper Earth, the Labour, Money, and Time will be in a great Meaſure loſt. I knew a *Chilturn* Farmer ſow White Oats in a wettiſh Loam, that returned him, indeed, Straw enough, but the Oats were of ſo thin a Body, that they were next to Chaff; which ſo diſcouraged this Farmer, that he never afterwards ſowed any more White Oats, though his large Farm contained various Soils. On the Contrary, I knew a Farmer that lived at *Bragenham*, near *Leighton*, in *Bedfordſhire*, every Year ſow no other Oat, than the white Sort, becauſe they returned him prodigious Crops off his ſandy Grounds, even to nine Quarters off an Acre, and that of the largeſt Sort of Kernels; but then he kept his Land always up in good Heart, by the Help of the Dung of many Cattle, for this Farmer employed both Grazing-ground and Plowed Ground, which gave him an Opportunity

tunity to keep Abundance of Cattle, and them of returning him Abundance of Dung. Now this Farmer was even neceſſitated to ſow White Oats, becauſe his dry Ground will not bear good Wheat, nor good Barley; therefore he chiefly ſowed Rye, Turneps, and White Oats; and, for obtaining a large Crop of ſuch Oats, he never failed of making Choice of the largeſt and cleaneſt Seed; and it is by theſe Means he uſed to ſell the beſt of Oats from off a pooriſh Earth, as his naturally was; but, when ſuch a Soil of pooriſh Land is enriched by the Dung of Animals, or by Manures, it then in many Parts of *England* agrees excellently well with Barley and White Oats; as is obvious to all who travel through the Counties of *Suffolk*, *Norfolk*, *Kent*, and other Parts, where, if they have Judgment enough to make due Obſervations in their Way, they may ſee great Quantities of ſandy Land ſown with theſe two Sorts of Grain, as thoſe which beſt agree with it; not but that a White Oat will grow very well on Gravels, Chalks, and dry Loams: But the chief Miſtake of all others is, the Sowing them in ſuch Soils that are Strangers to the Dung-Cart, or other fertile Dreſſing; for, to expect a full Crop of White Oats off a poor barren Ground, is the ſame as expecting a Horſe will do as hard a Day's Work, with Part of a Belly-ful of Meat, as thoſe who enjoy a whole Belly-full; yet, as abſurd a Thing as this is, it is the Caſe of many ignorant Farmers, who truſt ſo much to a wet warm Summer for producing them a plentiful Crop of Oats, that they even are careleſs about the Matter; and the more, becauſe Oats will grow into tolerable Crops, when hardly any other Corn will, with little or no Dreſſing; but he who dreſſes his Ground on Purpoſe, or he who otherways keeps it in good Heart, has

has two to one the better Chance of ſucceeding, as I am going farther to obſerve.

Of dreſſing Ground for an Oat-crop.—Dreſſing, as I ſaid, or not Dreſſing Ground on Purpoſe, for obtaining a full Crop of Oats, is not worth Diſputing; the Matter of Fact is, whether the Ground is in good Heart, at the Time of ſowing the Seed; if it is, an Oat-crop may, perhaps, pay as well as a Wheat or Barley-crop, in ſome particular Years when the two latter are cheap and the Oats are dear, as it ſometimes happens to be the Caſe; for ſix or ſeven Quarters of Oats, at ſixteen Shillings a Quarter, may fetch as much Money as Twenty-five, or Thirty Buſhels of Wheat will, at Three Shillings and Six-pence a Buſhel. And, therefore, thoſe Farmers who dreſs or dung their Land on Purpoſe for an Oat-crop, and not for a Wheat-crop, are much in the Right of it; becauſe they not only obtain very great Crops of Oats by this good Huſbandry, but likewiſe deliver their Wheat-crops that are ſown in *September*, or *October*, following the Oat-crop, from the Danger of Smut, and what we call *Pepper-wheat*, and from the pernicious Seed of thoſe Weeds that Stable-dung commonly is mixed with, and breeds on the Land where ſuch Dung is laid to ſupport a Wheat-crop. But, by Dunging the Oat-crop and not the Wheat-crop, if there be weedy Seeds carried into the Field with the Dung, the Danger here is not much, for, *in the firſt Place*, the Oats cannot ſuffer by Smut; nor, *Secondly*, hardly by Weeds, becauſe a full Crop of White Oats will not only prevent the Growth of old ones, but likewiſe of all new ones, and thus preſerve the Land in clean pure Order and Heart, for the Reception of Wheat-ſeed, and forwarding its After-growth with great Expedition. Yet I cannot ſay that this Caſe is without Exception, becauſe, where Oats are to be ſown on a gravelly

gravelly, dry, hungry Soil, that is dunged on Purpoſe for them, in order to ſow the ſame Land with Wheat, as a next Crop, without Dunging, I ſay, this may be of ill Conſequence to the Farmer, becauſe this voracious gravelly Soil may, in the Time the Oats are growing on it, eat up and exhauſt all the Goodneſs of the Dung to the Starving of the ſucceeding Wheat-crop. But, where a Loam or Sand, or Chalk, and ſuch like dry Earth is dunged, on Purpoſe for an Oat-crop, it may ſo affect the next Wheat-crop, as to produce a very clean, pure, and plentiful one, without any other Aſſiſtance, according to the Practice of many Farmers, who occupy that Sort of Land; which is ſo apt to breed ſmutty Crops of Wheat, that they dare not do any otherways than dung it on Purpoſe and directly for an Oat-crop, to prevent the dire Effects of dunging on Purpoſe and directly for a Wheat-crop. But, what ſhall I ſay of thoſe, who neither dung on Purpoſe for an Oat-crop, nor obſerve to keep their Ground otherways in Heart, for producing a plentiful Crop of them? Why, as they dung, ſo they muſt expect to reap or mow; as a young Farmer proved this Caſe to be true, who (as I have mentioned it in ſome of my former Works) upon receiving his Wife's Portion, took a large, chalky, poor Farm, in *Wiltſhire*, about ten Miles diſtant from *Newbury*, where great Part, if not all his Ground lay on a Hill, expoſed very much to the Power of the Wind and Sun, that ſuddenly increaſed the Dryneſs of his dry Land, whereon he ſowed a great Quantity of Oat-ſeed, without Dreſſing; and, as I remember, he had forty Acres ſowed in one Year, which happening to be a very dry and hot one, it ſo parched up his Oat-roots, that there ſoon appeared a moſt diſmal Sight; inſo-

much that the Crop was judged not worth Mowing: This obliged the young Farmer to turn in his Team of Horſes among the green Oats, which, I think, were nine in Number, to eat and feed on them; ſo that I cannot ſay the Crop was all loſt, but I think it paid this Way the worſt of any, for the Cattle muſt undoubtedly trample down and waſte a great deal of ſuch a green Crop; and, indeed, the bad Management thereof waſted the Farmer's Pocket, for this, and ſome more of his wrong Management, broke him.

Of ſowing White Oats.—The Sowing of White Oats deſerves a particular Regard, for there is this Difference between the White Oat, and the Black Oat: The Black will gather and branch much more than a White Oat, and, therefore, if an equal Quantity of Seed was to be ſown on an Acre of Ground, the Farmer may be deceived in his Expectation at Harveſt; wherefore, the *Bragenham* Farmer, I have been mentioning, does not ſow leſs than five Buſhels of White Oats on every Acre, in order to allow for the Deficiency of their Gathering and Branching; which is one more than we commonly ſow in our Loams, when we ſow them with Black Oats, for, with us about *Gaddeſden*, we ſeldom ever ſow, more than four Buſhels on an Acre of theſe Black Oats; but then, whether they be White Oats or Black Oats, they ought to be ſown twice in a Place, over the whole Field; for, as I have obſerved in laſt Month, many obſtinate and ignorant Farmers have ſuffered by ſowing them only once in a Place, as truſting to the Largeneſs of a Sower's Hand, to fling enough out of it at one Throw. And ſuch a double Sowing is of the greateſt Importance, for on the thick Growth of a Crop very much depends the Bigneſs of it at Harveſt, becauſe, by

ſuch

ſuch a thick Growth, the Weeds are overcome and kept down from hurting the Oats; and, likewiſe, the Heats and Droughts kept the better out from parching up the Roots of the Oats, which, in too thin a Crop, often proves fatal to it; for, when Oats are ſown in the Random or Broad-caſt Way, there is no more Mould allowed their Roots than what the Harrows and Roll give them; which, at beſt, is but a ſuperficial and moſt thin Covering, and, therefore, the more liable to ſuffer by Droughts, which is different from the Way of ſowing Oats in Drills.

Of ſowing Oats in the Drill-way.—It is true, that, when Oats are ſown in Drills, their Rows ſtand at a conſiderable Diſtance, enough to give the Sun and Air free Acceſs to their Roots for drying them; and ſo they would to the Loſs of the greateſt Part of the Crop, was it not for that Covering of Mould on them which they receive from the Drill-plough, that leaves ſo much on them, that not only ſecures the Oat-roots from the too violent Heats of the Sun, but likewiſe adminiſters to them ſuch a Nouriſhment, as indeed may be called a perfect Dreſſing; for the Salts of their looſe Top-earth, by being waſhed from Time to Time on them, proves ſuch a fertile Aſſiſtance as forces on a large Growth, while the Roots of the Oats lie in great Security againſt the Damage of Weeds or Droughts, and from being robbed of the Goodneſs and Vigour of the Earth, by thoſe Roots of Oats that grow too cloſely together, when ſown thick in the promiſcuous or Random-way on a poor Soil.

CHAP. V.

Of ſowing artificial Graſs-ſeeds *amongſt* White Oats.

OF ſowing Clover and other artificial Graſs-ſeeds among White Oats.—In ſowing all Sorts of Oats, it particularly concerns a Farmer's Intereſt to adjuſt the Quantity of their Seed as well as that of any artificial Graſs, that is to be ſown among them. On this Account he ought well to conſider the Nature and Strength of his Soil. If Oats are to be ſown in a Sand, or a Gravel, or a Chalk, without any Graſs-ſeeds, there ought to be the greater Quantity of Oats ſown, the better to enable the green Crop to lodge and ſhelter the Waters of Rains and Moiſture of Dews, for keeping ſuch dry Earth in a moiſt Condition; but then, if ſuch Gravel, Chalk, or Sand is in ſo poor a Heart, that it is not able to nouriſh and bring ſuch a poor Crop to a full Perfection of Growth, it will ſuffer by growing in ſhort Stalks, and poor lean Ears, and thin Kernels, and is thus the more unfit to be ſown with Clover or any other artificial Graſs-ſeeds. Of this a judicious Farmer is ſo well appriſed, that inſtead of ſowing ten or twelve Pounds of Clover-ſeed on one Acre of Ground, or two Buſhels of Trefoil-ſeed in its black Hulls, or the ſame Quantity of Ray-graſs Seed on an Acre, he will ſow but ſix Pounds of Clover-ſeed, or one Buſhel of either of the other Graſs-ſeeds, being juſt enough for one Feeding down at the next Spring-ſeaſon, with Sheep or other Cattle; and, as ſoon as ſuch a half Crop of Graſs is fed down bare, he will begin to plow up the ſame Ground,

Ground, and fallow for a Crop of Wheat. But, when a Perſon intends to enjoy a Clover-crop, a Trefoil-crop, or a Ray-graſs Crop, for a Year, or two, or three ſucceſſively, his Buſineſs is to take Care that his Ground be in good Heart, when he ſows his Oats and ſuch artificial Graſs-ſeeds among them. Not but that there is a Way to come by a good Crop of Clover, Trefoil, or Ray-graſs, though the Seed is ſown on a poor Ground, and that is this: If artificial Graſs-ſeeds are ſown on a poor Ground that is firſt plowed and made fine, they may take ſo well as to cover almoſt all the Land, and grow into a thick Crop the following Year; but as it is not reaſonable to expect there will be a rank Growth of ſuch artificial Graſs, without any other Help on ſuch poor Ground, a full Dreſſing or Manure of Soot, Malt-duſt, Lime, or Coal, Peat, or Wood-aſhes, or ſome ſuch Sort of Aſſiſtance ought to be put on the Graſs-crop in *January*, or *February* at fartheſt; and then, if a wettiſh Time ſucceeds the Sowing of ſuch Manure, there will, in Courſe, be a large Crop produced of ſuch artificial Graſs; as is ſometimes proved, but not very commonly, becauſe Farmers find it beſt anſwers their Intereſt, when they ſow their artificial Graſs-ſeeds on Ground dreſſed on Purpoſe for a Barley, Wheat, or Oat-crop, for that one ſuch Dreſſing very well anſwers both Ends; that is, to produce both a full Crop of Corn and of Graſs, and this for two Years together where the Land is naturally good; but, if it is naturally poor, then one Year will be long enough. Indeed, in ſome Parts, they let a Crop of one or other, or all together, of theſe artificial Graſſes lie three Years in all in gravelly Loams; but then they take Care to manure the whole Crop the ſecond Year for making it hold out ſo long in good

good Order, and this eſpecially is done on dry Grounds, that will bear the Feet of Cattle without their ſtolching it; and where ſuch artificial Graſs is more than ordinary wanted, as the Caſe is with ſeveral of thoſe Farmers who live between *Hempſtead* and *Watford* in *Hertfordſhire*; and here it is, that they ſow none but Black Oats, refuſing the white Sort, becauſe they would peel and impoveriſh their poor gravelly Soils, much more than the black Sort; but in other Parts, as in ſome Places of *Kent*, *Bedfordſhire*, and other Counties, they chuſe to ſow White Oats before black ones, becauſe they fetch the greater Price at Market, for the Sake of their ſuperior Largeneſs of Body, and delicate Colour; and likewiſe for that particular Benefit the White Oats afford all artificial Graſs-ſeeds that are ſown amongſt them; a Benefit that is very valuable in greatly ſecuring the Clover, Trefoil, or Ray-graſs in their infant Growth, againſt the Powers of Froſts and Droughts; and this by Means of the ſpreading Flags that always grow up with the Stalks of White Oats, more than with Black Oats, which greatly ſhade and ſhelter the Graſs from the Injuries of violent Froſts and Heats; but, in this Management of artificial Graſs-ſeeds among Oats, the Oats ought not to be ſown quite ſo thick as when they are ſown alone; becauſe too much Cover ſometimes kills the ſprouting infant Graſs, which is the Fault of, and what diſcourages many Farmers from ſowing Clover and other artificial Graſſes among Peaſe, becauſe their great Cover deſtroys oftentimes more than nouriſhes a Crop of young Graſs; and ſo does any other Corn-crop in a leſſer Degree that grows very thick, ſo as to choak the Clover, Trefoil, or Ray-graſs, while it is in its *embryo* Condition of Growth; and

and therefore four inſtead of five Buſhels of White Oats are enough to be ſown on one Acre, when any or all theſe Graſſes are ſown among them; and then there will be Room enough for Corn and Graſs to grow and flouriſh. The ſame Care ought to be regarded, when Graſs-ſeeds are ſown among Black Oats; where four Buſhels of theſe are to be ſown on one Acre, there ſhould be only three Buſhels and a Half employed, that the young Graſs may not be deſtroyed by too cloſe a Cover of the Oats; and although it may be ſaid, that ſuch artificial Graſs draws ſo much of the Goodneſs of the Ground, as to rob, in ſome Degree, the Oat-crop; yet it may be alſo ſaid, that the Shade and Moiſture, which an artificial Graſs yields to the Roots of the Oats, will compenſate for all Damage that may happen on this Account.——It is not too late to ſow Clover, St. *Foyne*, Trefoil, or Ray-graſs Seed in any Part of *April*; for it may be done very well now among Barley or Oats, and where a Perſon thinks fit to venture his Graſs-ſeed. It may likewiſe be done among Peaſe, as the tender late-ſown Puffin-pea, the blue Pea, or the *Eſſex* Roading-pea, *&c.* There are ſeveral Ways, as I have remarked in laſt Month, to ſow Clover or other artificial Graſs-ſeeds; but this Month, in particular, gives *Chilturn* Farmers a good Opportunity to ſow them by the nine Feet long wooden Roll, by Reaſon this Roll is commonly employed in this Month in the rolling of that Barley and Black Oats which were ſown in *March*, and for ſowing either Clover, Trefoil, Ray-graſs, or *Lucerne* Seed, *&c.* among theſe two Grains; the Way is, juſt before the Roll is to be uſed, to ſow the Graſs-ſeed twice in a Place, and then immediately draw the Roll all over that, and the Barley

ley or Oats only once in a Place, croſs the Broadlands; for we ſeldom ever draw the Roll twice in a Place, unleſs there be an extraordinary Occaſion for ſo doing, as when the Ground lies more clotty than ordinary; and, if a favourable wet Time happens afterwards in due Seaſon, there may an excellent Crop of ſuch artificial Graſs appear, when the Barley or Oats are mowed off; but, if a long dry Time follow, it may dry up the ſprouting Seed and kill the Crop, becauſe this ſuperficial Way of ſowing Graſs-ſeeds very much expoſes them to this Misfortune. However, there, is no Way, ſtrictly ſpeaking, that artificial Graſs-ſeed ſown at any Time, or in any Shape, is free of Danger of being ſpoiled or damaged: If it is harrowed in with Corn in *February* or *March*, the Froſts may overtake it and ruin its Growth; or, if it is Buſh-harrowed in, its Fate may be the ſame; or whether harrowed in, or rolled in, the Fly, or Slug, may devour it, before it has got Strength enough to reſiſt their Rapine. However, the Sowing of Clover, Trefoil, Ray-graſs, or *Lucerne*, by the Roll, in this Month, is the laſt Reſource; and, therefore, all thoſe who would enjoy a Crop of any or all of theſe moſt ſerviceable artificial Graſſes ought to ſow their Seed, at fartheſt, in this Month by the Roll; and, indeed, this Month is the beſt Time of all others, to ſow any of theſe Seeds among Barley in particular, where a Farmer has Reaſon to fear, that, by the Rankneſs or Richneſs of his Ground, their Graſs would grow ſo luxuriant as to choak or cripple the Barley-crop; as the Caſe has often happened to many, when a hot wet Summer ſucceeds the Sowing of it in a rich Soil; but, by this Way of rolling the Graſs-ſeed in at this Time of the Year, he is intirely free from this Sort of Damage, becauſe

becauſe the Barley-ſeed, being harrowed in ſo long before, has the Opportunity of acquiring ſo forward a Growth, as to be able to keep the Clover under, and prevent any ſuch Misfortune.——— St. *Foyne* Seed alſo may be ſowed in this Month among Barley or White Oats, though it is moſt commonly done in *March*. If it is to be ſown among Oats, the ſame Ground ſhould be duly prepared for it, by two or three Winter's Plowings to get it into a fine Tilth; for, unleſs this Piece of forward Huſbandry is well obſerved, there is no great Likelihood of obtaining a full Crop of St. *Foyne*, becauſe this is a large Seed, that cannot be well covered, unleſs the Earth is in a fine hollow Condition, for admitting the Harrow-tines to enter deep enough for the Purpoſe; yet, notwithſtanding ſuch Precaution is duly obſerved of preparing the Ground by ſeveral Plowings, by the better Sort of Farmers, there are others of the worſe Sort, who careleſly venture to ſow this or other Graſs-ſeeds on rough Tilths, and miſs their Crop by ſo doing, like one that told my Son on the 28th Day of *November*, 1743, he wondered his Father would oblige him to plow a Wheat Stubble-field up at this Time of Year, that muſt be plowed again hereafter for Sowing it with Oats and Clover; for that his Practice was, never to plow more than once for Oats and Clover, or for any other artificial Graſs-ſeeds, and, if they hit they hit; if not, it was only the Loſs of the Graſs-ſeed. Now this was a Youngſter, lately put into the Management of a very great Farm that his Father owned, and he had been bred up in all his Life, yet poſſeſſed with ſuch an abſurd Notion as this. But the ſame young Man was not much wiſer on another Account, for this laſt Summer, having ſown a large Field with Turnep-ſeed, it took all

over very well, which made him bargain with a Company of travelling Turnep-houghers, to hough this Field at the Price of five Shillings an Acre, and they fell to work directly on the ſame, but continued there only one Day for the preſent, by reaſon he did not make a ſtrict Bargain with them, not to leave off till the Whole was finiſhed, which gave them Room to take another Man's Turneps in the ſame Manner. Now it happened that a very dry, hot Seaſon came on the young Turneps, that plainly diſcovered the Crop would ſet, or what we call *burn* or *ſpoil*, if it was not houghed in due Time; and, as Houghers were therefore very ſcarce, theſe Workmen went about to take and ſecure all the Turnep-houghing they could to themſelves, and thereby occaſioned many Acres of them to ſpoil, for Want of houghing in due Time; for all the Houghings they gave the Turneps, after they were thus ſet, were to little Purpoſe; for, the dry Weather continuing a long Time, the reſt of this Field was not worth hardly ten Shillings an Acre, when the firſt Acre that was houghed in Seaſon was worth thirty Shillings; for the latter Sort was ſmall, hard, and ſticky, and unfit either for Boiling, or for Feeding Sheep on them. But this young Farmer is one of that Number who are beſt taught to do better by their own Harms. Now to return to my Subject of ſowing artificial Graſs-ſeeds, I have here further to add, that, when we ſow *St. Foyne-ſeed* among Barley or Oats, we never ſow this great Seed by only Rolling it in: No, this is too big a Seed to be covered by merely Rolling it in; therefore we always harrow it in, when ſown in the random or broad-caſt Way, and yet roll the Grain, and this ſome Time afterwards, when the Barley or Oats are high enough for the Purpoſe. But *St. Foyne-ſeed*, as well as *Lucerne-ſeed*, are indeed beſt ſown out of the Drill-plough

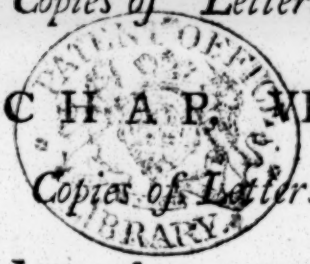
plough in Drills, becauſe here it will grow in a more certain and fertile Manner, than when it is ſown among Corn, where it is ſubject to be ſpoiled by Weeds, and the Fall and Cover of ſuch Corn, that in hot rainy Summers, in a rich Soil, ſeldom fail of falling down, and being laid flat before Harveſt, and then the young *St. Foyne*-crop, in all Likelihood, will be ruined. But, when the Seed is ſown in Drills, the Earth has nothing elſe to do, than to only nouriſh the young *St. Foyne*, which it will ſufficiently do of itſelf, without the Aſſiſtance of any auxiliary Dreſſing or Manure, and, with the Help of the *Dutch* Hand-hough, will alone nouriſh it for many Years together afterwards; for, when the Seed is thus ſown in Drills, the looſe Earth, that falls down directly on it, will not fail to ſecure it againſt Froſts and Droughts, and receive and lodge the Rains and Dews in ſo plentiful a Manner, that the young *St. Foyne* will grow into large ſtrong Stalks with great Expedition, as having been preſerved in its Seed from not only theſe Caſualties of Weather, but likewiſe from devouring Flocks of Pigeons, Rooks, and other Field-fowls, who have great Opportunities of eating up a great deal of this large Graſs-ſeed, when ſown in the promiſcuous or random Way; and then ſuch Damage is the more, as this Sort of Seed is ſown to produce a laſting Crop. But there are ſeveral other Encouragements for Sowing this large Graſs-ſeed in the Drill Way, rather than in the random Way; which I ſhall forbear mentioning here, and only ſay, that one Buſhel of it will better ſow one Acre of Ground in the Drill Way, than ſix Buſhels will in the random Way; for it is plain, that the laſt Way of ſowing is ſo hazardous, that Farmers frequently miſs of having full Crops of this Graſs, by Means of the many Accidents attending ſuch broad-caſt Sowing, when that

Seed ſown in Drills lies intirely ſecured from them. Now, to ſow *St. Foyne*-ſeed in Drills, the Diſtance of them may be made to a Perſon's Fancy. It may be ſown from ſix Inches Diſtance to eighteen; the further off the Drills, the leſs Seed, for then leſs than half a Buſhel will do; and what is very worthy of great Obſervation in this Caſe, there is no Occaſion for a Farmer to be at the Charge of twenty Buſhels of Soot to ſow over his young *St. Foyne*-crop, the ſecond or third Year of its Growth, as is the uſual Cuſtom with all our *Hertfordſhire* Farmers who ſow this Seed in their chalky Lands, or ſo many Coal *London* Aſhes, or Peat, or Wood Aſhes; becauſe the *Dutch* Hough may be employed every Year, or every ſecond Year, in raiſing Earth in the Interſpaces between the Rows of *St. Foyne*, killing deſtructive Weeds; and, by laying ſuch Earth to the Roots of the *St. Foyne*, it will nouriſh them in an ample Manner, without any other Aid or Aſſiſtance from Dungs or Manures, and, indeed, is a greater Nouriſher of Crops than moſt Perſons think; as is evident from thoſe Wheat-crops ſown in the random Way on fine Tilth Earths, which oftentimes produce large Crops, without any Dung or Manure whatſoever, merely by the Help of extraordinary pulveriſed Land, even better than ſome that is rough and ſowre, when the Wheat-ſeed is ſown in it, and well dunged beſides. *Lucerne* likewiſe may be ſown in Drills out of a Drill-plough, by Means of a Seed-box made on Purpoſe for it; for, as this Seed is hardly any bigger than Clover-ſeed, none of the Corn Seed-boxes will do it; and, when *Lucerne*-ſeed is ſown this Way in Drills, the Crop is much more certain, than when the Seed is ſown in the random broad-caſt Mode of Sowing it, which is ſo uncertain, that many loſe the Benefit of ſowing this ſmall Seed this Way, by

the

the Fly, the Slug, and the Accidents of Weather and Weeds; for, in the common broad-land Way of ſowing *Lucerne*-ſeed, the Twitch or Couch-graſs and other pernicious Sorts, in the ſecond or third Year, generally get up and begin to choak, and, in Time, kill the *Lucerne*-crop. But, when *Lucerne* is ſown out of the Drill-plough in Drills at a Foot aſunder, then the *Dutch* Hand-hough may be employed between the Rows of this Graſs now and then, to kill and prevent Weeds, and mould up the Roots of the *Lucerne*; and, when this is duly done, there is no Fear, but that a Farmer may enjoy the Benefit of ſuch a *Lucerne*-crop many Years in Perfection, without the Help of any Dung or Manure. However, this is certain, that all drilled Corn-ſeeds, or Graſs-ſeeds, will thrive and proſper, and ſo will their Crops, with far leſs Dung or Manure, than when they are ſown in the common broad-caſt Way of ſowing them. And I further aſſert, that all Annuals, or Corn-crops produced by Seed ſown every Year in Drills, will proſper without any other Aſſiſtance, than what the Horſe-break, or *Dutch*, or other Hand-hough may give them; as is evident by the many Wheat, Barley, and other Crops produced by the Help of the Drill-plough and theſe Inſtruments. But then ſuch Corn-ſeed muſt be ſown every Year in freſh Land; that is to ſay, in the middle Part of a new Interval, which always lies between the laſt drilled Corn in a flat Situation of the Land, and not in Ridges of any Kind.

CHAP.



CHAP. VI.

Copies of Letters.

The Copy of a Letter from a young Man that the Author recommended as a Ploughman to a Gentleman.

SIR,

I AM very ſorry I cannot acknowledge your Kindneſs, as I heartily wiſh I could; but, becauſe the Strictneſs of my Place will not permit me, I therefore muſt deſire to be excuſed, until Opportunity offers, when I ſhall endeavour to perform the ſame to my greateſt Power, which would give me great Satisfaction. I have but a poor Place; but, as I have a good Maſter, who gives me good Encouragement, I can better bear with it. I have lately been very ill of a Fever and Ague; but, having a good Miſtreſs, who took great Care of me, am ſince, Thanks be to God, reſtored to good Health. I have lately been confirmed by the Biſhop, and ſince have received the bleſſed Sacrament to my preſent and future Happineſs. I hope you are all in good Health, as I am at preſent; I ſhould be glad to hear from you, when Opportunity offers, how you all are, which would give me great Satisfaction; we have a poor ſandy Soil, and very hilly, and therefore we make Uſe of a Sort of Swing-plough, which exceeds all others I ever ſaw, for its Lightneſs and Cutting a fine ſhallow Furrow, which makes it the propereſt for a poor thin Soil of any Sort of Earth; for this Ground is ſo poor, that it will hardly produce above three or four Crops, before it muſt be laid down to reſt for Paſture two or three Years together, this being a Sort of Soil that, ſooner than moſt others, gets into a good

a good Paſture, becauſe of its ſandy Nature, which anſwers to Profit near as well as Rye and Oats, that are the moſt proper Grains for this Sort of Earths, which will hardly produce any other, unleſs it be much improved by Turneps and Clover, that are the greateſt Improvers of ſuch Land; for, before theſe Improvers were practiſed here, our ſandy Soils would yield no other than Rye and Oats, and with theſe Sorts their Markets were chiefly ſupplied; but, ſince theſe Improvements have been made, we have great Plenty of Wheat and Barley in the greateſt Part of this Country. But the Improvements we make by ſowing Turneps is extraordinary; for this Sort exceeds all others for improving our Land, deſtroys all Manner of Weeds, and at the ſame Time much improves the Land, and is our chief Food for fattening Cows and Sheep, and affords us fine Meat, becauſe of their wholeſome Quality. This Sort is commonly ſown in their fallow Year, after two, or three, or more Plowings, according to your Way; and the following Crop is Barley and Clover, and then Wheat or Rye, and then Oats, or it is laid down for Paſture for two or three Years or more, and then they often muck it for Wheat, if it requires, about *Michaelmas*, when they intend to ſow it. Another Improvement is of Turneps and Rapes; theſe two Sorts are ſometimes ſown together for a late Crop, when they do not intend to hough them, and afford a fine plentiful Crop, which very often exceeds a ſingle Crop of Turneps, becauſe they ſtand two Chances; if one miſſes, the other hits; but, if they both hit, they exceed the former, becauſe the Rapes commonly run above the Turneps, by which Means they afford two Crops; but when the Rape is ſown by itſelf, as ſometimes it is, it anſwers very well, and

and much improves the Land, as alſo for Fattening of Sheep. From, *Sir*,

Pleaſe to direct for me at
in July 24, 1743.

Your obliged humble Servant.

Remarks on this Letter.

THIS young Man I ſent to a Gentleman (a Stranger to me) in the *North*, in 1742, who lives about a hundred Miles from *London*; where he behaved ſo well the firſt Year, that he is hired to ſtay in the ſame Place another, for greater Encouragement than he received before, becauſe he is a ſober, virtuous, diligent young Man, well qualified in the Plowing and Sowing of various Soils, and performing moſt other Works in the Farming Buſineſs in great Perfection; and hereby he has given me the Satisfaction of anſwering the Character I gave the Gentleman of him, which is not a ſmall Pleaſure to me, nor a little Benefit to him; for, as he lives with a Perſon that is reputed to be one of the beſt of Maſters, it will undoubtedly redound to his Advantage, as well as my Reputation. And altho' he has, as he ſays, a hard Place of it (I ſuppoſe of the Working-part) I am not ſorry to hear it: It is what I act myſelf towards my own Children and Servants, for I *collar* the firſt (as our Country Term is) as early as poſſible; that is, I bring them up to work as ſoon as they are able to do any Thing, and continue ſo doing, the better to fit the Back to the Burthen; for, when they are accuſtomed to labour in their Youth, Work becomes the eaſier to them afterwards. I have a Boy but ſixteen Years of Age, that thraſhes me Wheat, Barley, Oats, Peaſe, Beans

Beans, or Thetches; and who, in *October* 1743, thraſhed me out five Buſhels of Hog-peaſe in one Day, and threw them out of the Chaff; and, tho' he is my Son, I favour him not, in Reſpect of Confinement and Labour; but, for his Encouragement, I give him ſmall Wages: By this Means he is always in his Sphere, when he works hard. I have another Son, my Ploughman, that is ſo naturaliſed to Fatigue, by bringing him up in this Manner, that, if he is kept idle but one Day in the Houſe, he proteſts it is more diſagreeable to him, than Labouring all that Time. My Servant alſo, by my Son's Example of cloſe Application to Buſineſs, keeps him Company at the Labouring-Oar; and, if he was a negligent idle one before, he now becomes pliable to Work. And to make ſure of a Day Labourer's performing equal Work with my Son in making and plaiſhing Hedges, Thraſhing, *&c.* I pay him half Wages; that is, I give him Half what he and my Son earns for that or other Work that admits of Meaſuring. But the Conveniency of all this does not end here, it fits them the better for other Service hereafter; and, as I help Gentlemen to Servants, I endeavour to ſend ſuch as underſtand Work, and will diligently perform it in Huſbandry Affairs: And I have the Happineſs to ſay, I never yet came off with any Diſreputation this Way. Not but that I may, as well as others have done, ſend a Servant that may not anſwer my Character, as not being able to anſwer for future Behaviour; but, if any Gentleman leaves the Choice of one to me, my Endeavours ſhall not be wanting to recommend one that will give Satisfaction. And if a Perſon has a Mind to have one that can hold the Drill-plough, and employ the profitable new invented Horſe-break, *&c.* it may be worth ſuch a Gentleman's While to be firſt at the Charge of a Guinea, on Purpoſe to have a Plough-

man qualified to manage theſe advantageous Inſtruments before he comes to him (if he is not already) which I will undertake to get him learned, and be Maſter of in one Week's Time; for when a Servant has been hired, and lived as a Ploughman before, to hold and work common Ploughs, he will preſently and eaſily learn to hold the Drill-plough, and work the Horſe-break, *Dutch* Hand-hough, *&c.* and perhaps, on this Account, the Guinea ſo given may prove the beſt Money the Gentleman ever laid out in the Farming Buſineſs. I have ſince received another Letter from this young Man, dated the 17th of *Auguſt* 1743, wherein he very judiciouſly gives me a further and valuable Account of their Farmers Management in the Country he lives in.

The Copy of a Letter from this Author to a Gentleman, concerning the Uſes of burnt Clay, and ſeveral other Matters.

SIR,

A Letter, dated the 19th Inſtant, I received from your Bailiff, and have here ſent you an Anſwer to the ſame, as I have done to two others before to him, and rode near twenty Miles to find out a Man to burn you Clay into Aſhes; and ſhould be very glad to make Uſe of all Opportunities to do you Service, ſince I met with an Encouragement for it, from Mr. ————, who gives you the Character of a worthy Gentleman.

Your Bailiff tells me, in one of his Letters, he could never have believed Clay could be burnt into Aſhes, had it not been for my Books. But, as he is now convinced of it, by burning large Quantities, he writes me Word he is at a Loſs how to apply them. This, therefore, is to let you

you know, that, as I have burnt Clay myſelf, ſeen it done by others, and the Aſhes made Uſe of, I have to acquaint you, that there are ſeveral excellent Uſes that theſe Aſhes may be put to, provided they are rightly managed; but, before I come to theſe Particulars, I would obſerve, that, although the Burning of Aſhes may anſwer to very great Profit, when done on a good Account; as, where a Pond, a Cellar, a deep Ditch, or ſubterranean Drains are to be made, or Ant-hills, or other Excreſcences of Earth, are of Service to remove from off the Spot of Ground; in any of theſe Caſes, if the Soil is a Clay or other auſtere rough, ſtiff Earth, it may be of vaſt Service to burn it into Aſhes; and it is by far better put to this Uſe than to be at the unneceſſary Charge of carrying it away to diſtant Receptacles, or other Places, where, perhaps, it might lie a Nuſance or uſeleſs. But to ſpoil a ſerviceable level Surface, by digging into it and making and leaving Pits open, purely for the Sake of getting Clay and burning it to Aſhes, may be of very ill Conſequence; and, to prevent Miſchief from open Pits, the new Invention took its Riſe of digging only a round Hole of three Feet Diameter, enough for a Tub to be let down, and drawn up with Chalk, for chalking our *Hertfordſhire* plowed Fields; and this Hole we now commonly make in a Hedge, on Purpoſe that it may be the more out of the Cattle's Way, to prevent any Danger of their falling into it. Whereas, heretofore, we uſed to make and leave large Pits, perhaps, fifteen, twenty, or more Feet wide to come at our Chalk, and this in the Middle, or ſome other open Part of a Field, which has occaſioned many Misfortunes; I knew two Horſes ſpoiled, by falling into them. However, the Burning of Clay is certainly of great Uſe, where it can be done to Conveniency

and Profit, and therefore it comes more and more into Practice, as Denſheering or Burning only Graſs-ſurfaces two, three, or more Inches deep does leſs and leſs; becauſe the Upper *Stratum* of ſuch Graſs-ground is the beſt and richeſt Part of it; and to burn this into Aſhes for a Manure may, probably, by the fertile Salts of it being burnt and looſened from ſuch Earth, produce three or four good Crops of Corn ſucceſſively; but, afterwards, Barrenneſs with a Witneſs muſt enſue, till there be more Money laid out for great Quantities of Dung or other Dreſſing, than the Aſhes of ſuch a Surface availed. This old, ſilly, ſhort-ſighted Piece of Huſbandry is now held in ſuch Contempt of burning only Surfaces into Aſhes, that, did a Perſon go about to perſuade a *Hertford-ſhire* Farmer to ſuch a Practice, he would take that Man to be either a Fool, or one that deſigned his Ruin. This leads me to remark, that ſuch an evil Practice may be put out of any malicious Tenant's Power, if it is ſpecified in an Article or Leaſe by a penal Covenant, that he ſhall not burn any Surface of Earth (without the Landlord's Leave in Writing under his Hand firſt obtained) for the Sake of the Aſhes it will make for producing an extraordinary preſent Crop, leſt he, near the Expiration of his Time, do this, to get out the Heart of ſuch Ground, and leave it in ſuch a poor Condition for the next Tenant, that the Landlord muſt ſink his Rent to get one; not but that there is Room for Exceptions even on this Account. Where Heath-ground, Ruſh-ground, or ſuch like is to be converted into a better Sort, then, indeed, Burning ſuch a Surface may be abſolutely neceſſary to deſtroy the Roots of Furz, Fern, Ling, Flag, or Ruſh, and for making Way for the Plough to get Crops of Corn

Corn in their Place, or good Graſs to ſucceed in their Room. For this Purpoſe there is more than one Way to burn Clay into Aſhes; one is, by burning it in a Heap in the open Air, as we do Peat, with the Help of Roots, Faggots, or other Offal-wood and ſome Turf or Mould put next on it, to kindle and light the Fire, till it burns into the Clay; and, then only with a gradual Increaſe of Fire, and Cover of dry or wet Clay, or both, on the Outſide of the Heap to enlarge the Quantity of the Clay and keep the increaſed Fire at the ſame Time from Burſting out, the Workman may carry on his Burning with Safety till he has burnt Hundreds of Loads of Clay in ſuch a Heap, for ſo vehement is ſuch a confined Fire, that it has burnt Flint-ſtones to Powder, much more a Clay, that is of a ſofter Body; but as I have already in ſome of my former Works been particular in Writing on this Subject of Burning Clay in the open Air in a Heap, which is the only Way practiſed by Farmers, and ſome Gentlemen, as a cheap and very ready one; I ſhall not ſo much enlarge on it as otherwiſe I would do, but obſerve, that the Burning of Clay in a Clamp is, by two Authors, recommended as the beſt Way of all others; and that the Burning of Clay wet is much better than when burnt dry, for Reaſons the Author on improving Clay-ground aſſigns; but, for my Part, I know of none, as yet, that burns Clay for Manure in a Brick-clamp, and therefore ſhall here only remark, that, when Clay is burnt to Aſhes, ſuch Aſhes are not to be carried into the Field as they are, and as ſome have done, and laid them in a promiſcuous Condition on the Ground; no, this would be perfectly wrong Management, and have the ſame chargeable Effect, as happened to two ſeveral Gentlemen

men through the Ignorance of their Bailiffs, who carried their Clay-aſhes, and ſpread them over the Graſs-ground they were to improve, as they were burnt, without firſt ſeparating the groſs Sort from the fine; and thus Pieces of burnt Clay, like little Pieces of Brick-bats were laid over the Graſs-ground, in Aſſurance that the Froſts would ſhoal and diſſolve them; but, on this Account, their Expectation was deceived, for theſe Pieces of burnt Clay had too much of the Clinker Nature in them, to diſſolve by Weather, at leaſt, not in a very little Time; which obliged the Owners to be at the Charge of having them picked off the Graſs and carried away. Therefore, when my Affairs will permit me to wait on you at your Seat, I will ſhew your Bailiff a new Method of applying theſe Aſhes in a far more profitable Manner than hitherto has been done by any Perſon I know, beſides one particular Gentleman's Bailiff, who moſt commonly every Year burns more or leſs of theſe Aſhes; for to burn Clay into Aſhes, and not know how rightly to apply them, is but doing the Work in Part. In the mean Time, I ſhall in the next Place acquaint you with an Account of the famous Drill-plough, Horſe-break, and *Dutch* Hough.

A Gentleman, altogether a Stranger to me, living about ſixty Miles diſtant from *London*, on reading, in my Monthly Books, the great Benefits I have in them ſet forth, that will accrue to all Occupiers of proper Soils that make Uſe of the Drill-plough, Horſe-break, and *Dutch* Hough, ſent me an Order lately, to provide theſe two firſt Inſtruments with all Expedition; accordingly I beſpoke their Making of the original Makers, to be compleatly made in three Weeks Time at fartheſt. In the mean Time, the Gentleman wrote to me to deſire, I would inſtruct his Bailiff in their Uſe

Uſe, and he would ſend him to where I ſhould appoint. He came, and I ſhewed him various Fields of drilled Wheat at a Foot Diſtance each Drill, and others ſowed with Barley, Peaſe, and *Lucerne* Graſs in Drills out of the Drill-plough. The Wheat, the Barley, and the *Lucerne* Graſs were kept clean houghed, ſo that hardly a Weed was to be ſeen in the Intervals, by the Help of the *Dutch* Hand-hough; but the Peaſe were (and ſo are Horſe-beans) aſſiſted by the famous Horſe-break, being a new-invented and moſt excellent Inſtrument for ſaving the Charge of Hand-houghing, and forcing on the Growth of prodigious Crops, even in dryiſh Summers; for this double, but very light Machine, rakes and breaks the Earth between the Rows of Corn, and turns it on the Roots of them, being an improved Invention on the moſt ingenious Mr. *Tull*'s Horſe-hough Plough, and is now made Uſe of by many common Farmers, as their Jewel-Tool, for enabling them to get Crops to pay their Rents and live well. And, therefore, I recommend the Drill-plough, Horſe-break, and *Dutch* Hand-hough, as extreme profitable Implements for uſing in ſome of your dry Soils, for I am ſenſible, the large Farm, you have lately taken into your Hands, abounds with ſeveral Sorts of Earths. I have ſent ſeveral of theſe Inſtruments to foreign Parts, as well as to Gentlemen in *England*, for improving their Eſtates, in the cheapeſt Manner poſſible, where the Soil will admit of their Uſe; and this I aſſert as Matter of Fact, becauſe in a clean ſandy Loam, a gravelly Loam, a chalky Loam, or in an intire dry Loam, and ſuch like Land where a Drill may be commodiouſly made, if a Perſon thinks fit, he may carry on the Cultivating, Sowing, Reaping, and Mowing of Corn and artificial Graſſes, without the Aſſiſtance of any other live Cattle than Horſes

or

or Oxen; and, as great an Improbability as this may appear to ſome, I can prove it to be true by ocular Demonſtration to any Perſon that ſhall think fit to be at the Charge of being thus informed of the Truth on the Spot. But what is farther extraordinary remarkable in this new Sort of Drill-Huſbandry is, that all Dung or Manure, uſually laid on Corn-lands for improving their Crops, may be wholly appropriated to the Enlarging of Graſs-crops; for, in this new Way of Farming, the Corn-crops want it not, and, therefore, all Dung and Manure, that may be made, has here an Opportunity to be employed on Meadow-ground, or where Clover, or other artificial Graſs-ſeeds, or Turneps, or Rapes are ſown in the Random or Broad-caſt Way. Thus a Gentleman, or Farmer, whoſe Land is agreeable to this new Huſbandry, may carry on this Buſineſs in a moſt cheap Manner, as being in no abſolute Want of live Stock more than Horſes; but I am ſenſible, that in this Caſe there will ariſe a Queſtion, how Crops of Corn, *&c.* can be nouriſhed without Dung or Manure? To this I anſwer, That, the twelve Inches Interval of Earth between the Rows of drilled Corn being moſt carefully kept weeded and cleaned by the *Dutch* Hand-hough, the Mould, raked by this Means from Time to Time on the Corn-roots, will prove a ſufficient *Pabulum* or Nouriſhment to them for producing large Crops. And when the Wheat or Barley is to be ſown next Year, without any Dung or Manure in the ſame Field, the new Drills muſt be made in the Middle of the laſt Intervals; and thus every Year new Seed may be ſown in new and freſh Ground, by which Means the Wheat will be delivered from that pernicious Diſeaſe incident to a Wheat-crop, when dreſſed with Dung, called *Smut*, and likewiſe from that called *Pepper-wheat*, if the Seed is clean

clean, when ſown; but was I to enumerate all the Advantages appertaining to the Sowing of Grain, artificial Graſs-ſeeds, Turnep-ſeeds, &c. in Drills, I might enlarge to the Number of above Thirty.

I have lately diſcovered four Sorts of excellent Wheat-ſeeds, never yet ſown in *Hertfordſhire*; two whereof excel the old common red *Lammas*, that has carried the Bell Time out of Mind, for making the fineſt of Flour; but theſe two make finer than that, as I have heard ſome capital Bakers and Farmers affirm to be true. A third Sort I have ſeen grow in Drills, made by the Pulley Drill-Plough, that carries a great Number of Corns in a very thick bunchy Ear, I believe as many again as ever grew in a *Lammas* Ear; and, as I remember, the Gentleman Owner told me it was a *Turky* Sort of Wheat, but, being the firſt Time of Sowing it in 1742, he was at a Loſs then, to let me know the true Nature of it. The fourth Sort is, likewiſe, a foreign Grain, lately introduced into this Nation, whoſe Character was ſent me by a Gentleman, a perfect Stranger to me, out of a pure Love to his Country, as knowing me capable of ſpreading the Knowledge of its excellent Vertues throughout the Nation; which are, that in ſandy, chalky, gravelly, or dry intire Loams, this Wheat may be ſown to great Profit, but not till the Month of *March*, and yet will flouriſh and be ripe at the ſame Time other Wheat is. And, what is farther extraordinary of this Wheat, he ſays, it will be as good a Crop in ſuch poor Soils, as other Wheat will in rich Soils, as by his Letter to me he affirms to be true. If ſo, it muſt be of vaſt Service to this Nation to ſow it in *March*, as ſoon as a Crop of Turneps, Rye, or Rape is eaten off. Now all theſe

Sorts of Wheat are nearly alike in their Bodies to our common Sorts, and, as the firſt two Sorts make finer Flour and Bread, than common *Lammas* Wheat-flour does, they will, in Courſe, ſell in our Markets before all others; and as the fourth Sort out-does all other Wheat-ſeed in *England* for ſowing late in a poor Soil, ſurely, if any cay afford to buy it, and have an Opportunity of ſowing it in a proper Soil, and do not, they are wanting to their own Intereſt; Gentlemen eſpecially, becauſe, in neglecting this, they are neither their own nor their Tenants Friends.

I am Maſter of an excellent Secret, that intirely prevents the Slug, or naked Snail, and Fly, from eating and ſpoiling young ſeedling Turneps, Rapes, Weld, Flax, and many other Vegetables, both in Fields and Gardens, in their infant Growth; and, although it ſhould rain a Month together, this Antidote will not loſe its Vertue, becauſe it is no Powder, but will do the Feat infallibly, and nouriſh the Crop at the ſame Time to great Perfection.

I have, likewiſe, a moſt valuable Way to prepare Wheat-ſeed without Brine, which gives the Farmer a great Deal of Trouble, and a conſiderable Charge, beſides Loſs of Time; but this Way compleats the Managing and Preparing of two Buſhels and a half or three Buſhels of Wheat-ſeed for Sowing in a Quarter of an Hour; will deliver it from the Danger of Smut or being Pepper-wheat, greatly nouriſh it, and hinder the Worm's Miſchief. A Way I always follow myſelf, and have conſtant Succeſs by it, and all for the Sake of Two-pence Charge for curing ſo much Wheat as ſows one Acre. For Barley-ſeed I have alſo ſeveral Ways of preparing it for Sowing, for leſs than

than Six Pence an Acre's Charge. Now all theſe, and Hundreds of more uſeful Secrets, I could publickly diſcover for improving Huſbandry; and therefore all Gentlemen, in particular, ought to encourage the Communicating them, becauſe Gentlemen are more liable to be impoſed on than Farmers, as they are obliged to do their Buſineſs by a Steward, a Bailiff, or Ploughman. It is on this Account, I ſay, he ought to qualify himſelf with ſo much uſeful Knowledge, as may enable him to make a tolerable Judgment when a Thing is done well or ill. And as there is a moſt dangerous Tenet or Principle reigning in many of the common poorer Sort of People, *viz.* That it is no Sin to filch or ſteal from a rich Man, becauſe he can afford to ſuſtain a Loſs: --It highly concerns a Gentleman that occupies his own Land to have his Wits and his Eyes about him, to prevent Impoſitions, and take all Occaſions to improve his Eſtate in the beſt Manner poſſible, to balance the ſeveral Loſſes they are more than ordinary liable to. And here I muſt obſerve, that one great Security, againſt the Thievery and Rapine of Travellers and the worſe Sort of People, is for a Gentleman to be affable, kind, and benevolent to his Neighbourhood in particular, for by this Means they will not only be obliged to do ſuch a Benefactor all the Good that lies in their Power, but endeavour to prevent others doing him any Harm; for, as they are many and he but one, they may ſee and prevent that which neither he nor his Servants can. I heard a Gentleman ſay, he feared ſuſtaining no Damage from his Neighbours, by Reaſon he always did them what Service his Conveniency permitted him. I could enlarge very much on theſe Particulars, but I preſume you will think I have been tedious and too free already;

which, in Hopes you will excuſe, I ſubſcribe my ſelf,

Sir,

Your moſt obedient humble Servant,

to command,

Little Gaddeſden, Auguſt 25, 1743. **W. Ellis.**

To ——— Eſq;

The Copy of a Letter from this Gentleman to the Author.

S I R,

I Am very much obliged to you for your Letter of the 25th Inſtant, and for the Hints you were ſo kind to give me in it, touching the Manner of uſing burnt Clay; and, when I have made Trial of it, I ſhall let you know what Succeſs I may meet with therein.

If your Affairs ſhould bring you my Way at any Time, either in Town or Country, I ſhould be extremely glad to ſee you. I am

London, Auguſt 31, 1743. *Your very humble Servant.*

The Author's Remarks on this Letter.

This Gentleman I, as well as moſt, if not all others that know him, account one of the moſt accompliſhed Perſons we have at this Time in *England*; as the great Buſineſs, he weekly very honeſtly, diligently, and accurately diſpatches, declares

declares him likewiſe to be, to the Satisfaction of all who have to do with him, in the particular and momentous Sphere he acts in: Yet in Farming or Huſbandry Affairs he is, in ſome Meaſure, a Stranger. However, being a Gentleman of better Senſe than to prefer Pride to Humility, he condeſcends to conſult ſuch an inferior Perſon as I am; who, although I bear no Compariſon with him in Reſpect of his great Eſtate and Learning, it it plain, he is not above adhering to the Advice of a Man, that has acquired his Knowledge in the Art of Agriculture, by chargeable Travelling, long Experience, Converſation, and Study; and ſerviceable Advice muſt be of the greater Importance to ſuch a Gentleman in particular, becauſe his Town Affairs oblige him to be hardly above one Day in the Week at his Country Seat, and, therefore, he is neceſſitated to truſt the more to the Management of his Bailiff, whoſe Conduct he will become the better Judge of, as he increaſes his Knowledge in rural Affairs, by reading Books on this Subject, and conſulting their Authors; and this he has the greater Encouragement to do, as he occupies a very large Farm at this Time of his own, ſituated within a Day's Journey of *London*, that gives him not only an Opportunity of enjoying a healthful Recreation, but likewiſe may furniſh his Town-houſe with Variety of freſh, wholeſome, and delicate Proviſions to his great Profit and Pleaſure; which, if I was here to enumerate, it would employ my Pen in a longer Diſcourſe than I can at this Time conveniently write.

CHAP.

CHAP. VII.

Of Peaſe to be ſown in this Month.

Of the particular Sorts of Peaſe requiſite to ſow in April.—This Month gives many of the *Chilturn* Farmers an Opportunity to improve their Land, by ſowing it, at this Time, with a Sort of Peaſe proper for the Seaſon of the Year; for on this very much depends the Succeſs of a Pea-crop; a Truth often proved by the fatal Effect of a wrong Conduct, when it is employed in ſowing that Sort of Peaſe in *January*, *February*, or *March*, which ſhould not be ſown before this Month, becauſe their tender Nature renders them unable to withſtand the ſevere Aſſaults of Northerly and Eaſterly Winds, which in theſe Months generally blow in a more nipping and ſharper Degree than at any other Time of the Year. From hence it is, that, though the Soil is duly prepared, and the Seed got in Perfection, and the Sowing of it performed in the beſt Manner poſſible, yet all this will not ſecure a plentiful Crop of Peaſe, if the Farmer ſows a wrong Sort at an improper Time. After many Years Experience, we *Hertfordſhire* Farmers have found none to anſwer our Intereſt ſo well as the Horn-grey Hog-pea, the Maple, the Blue, and the White. It is theſe four Sorts that we chiefly ſow in our incloſed Fields, in Refuſal of all others, becauſe we find, by repeated Experience, that theſe beſt agree with our various Soils, when ſown, in a proper Manner, at the right Time of the Year. If we ſhould ſow a Horn-grey Pea in *April*, the Farmer would deceive himſelf in his Expectation of a Corn-crop, becauſe, inſtead of that, he would get little elſe but Straw; for this Pea is of ſo hard a Nature, and ſo ſlow of Growth, that it requires ſix or ſeven Months,

to

to ripen into a plentiful Crop of Peaſe, when a blue Pea, and others as tender as that, will be in Perfection for Mowing, or Hooking, in four Months; ſo different are the Qualities of theſe two Sorts of Peaſe, though both grow the ſame Year in the ſame Sort of Ground. It is, therefore, that, if a blue or other tender Pea was to be ſown in the Months of *January* or *February*, the Crop would conſequently be loſt by the Severity of the Weather, becauſe the *Hampſhire* Kidpea, or Kidwell, the Maple, the *Eſſex* Roading, the Puffin, the *Spaniſh* Mulatto, the Rouncival, *Dutch* Admiral, the Marrow-fat, the Non-paril, the blue Union, *&c.* are all of them of ſo tender a Nature, that, if they are thoroughly pinched and nipped by a very hard Froſt at Root and Stalk, they can never recover a right Growth again, but will ſhew their Sickneſs and Decay by their red and withering Heads. At beſt, a Pea-crop is ſubject to more fatal Accidents than any other Corn we ſow beſides; inſomuch, that, in the Random, Common, Broad-caſt Way of ſowing Pea-ſeed in Fields, we hardly get a full Crop of them above once in three Years, becauſe the Cold, the Drought, and the Slug are all Enemies to Pea-crops, when they happen to be in too great a Power for their regular Growth; which leads me to write on their particular Damage, for the Knowledge of the Diſeaſe is ſometimes half the Cure.

Of the Damages that ſometimes happen to Pea-crops by too early Sowing and Exceſs of cold Weather.—As Froſts and Chills of Waters are very great Enemies to the Growth of Corn-crops, and moſt of all to Pea-crops, it behoves the Farmer to be more than ordinary upon his Guard in preventing their Miſchiefs. Now this is to be done by ſeveral Means: 1*ſt*, By Sowing the Seed in an agreeable

greeable Soil, and at a proper Time of the Year. If a Perſon would ſow Hog-peaſe ſo forward as in *January*, he muſt not only ſow a Horn-grey Pea, then, but do it in a warm dry Soil, as, in a chalky, ſandy, gravelly, or very dry Loam, becauſe theſe ſtrain off the Waters from the Pea-roots in a little Time, and thereby deliver them from their ruinous Stagnations; for, if a Farmer was to ſow, at that Time of the Year, the hardy Horn-grey Pea on a clayey or a flat, ſtiff, wet, loamy Soil, he has juſt Reaſon to expect to pay dearly for his Miſtake, and fear the Loſs of his Crop by ſo doing; becauſe here the infant Sprouts of the Pea are infeſted, on all Sides, with the Chills of Air, of Water, and of Earth, that conſequently will overcome even its hardy Nature; for, if the larger and older Plants of Roſemary, Rapes, and many others are overcome and killed, by the Severity of Froſts, and Chills of Wetts, and Winds, that ſometimes happen in *January*, *February*, and *March*, as they did in the Year 1739, how much more will new-ſown and ſprouting Peaſe be liable to be deſtroyed, when they are ſown in an auſtere, ſowre, cold, chilly Earth, and ſuch a Seaſon of Weather ſhould ſuddenly follow and continue for ſome Time. Yet, as abſurd as ſuch a Conduct ſeems, I have known it ventured on by Farmers, who by their long Practice ſhould have acted otherways; and this Miſtake they are the rather led to commit, becauſe they may ſometimes chance to get a good Crop of Peaſe by ſuch an early Sowing in a cold ſtiff Soil, when a mild Spring ſucceeds; and then, in Hopes of the like Succeſs another Time, they run the Riſque of repeating the ſame hazardous Piece of wrong Huſbandry, but generally to their Loſs; which they likewiſe are tempted to do, becauſe of their getting their Land ſown with Beans, Peaſe, and Oats,

before

before Barley-ſeaſon comes on in *March* and *April*, and thus fall ſhort of that full Crop of Peaſe, which, perhaps, they ſee their next Neighbour enjoy, who ſowed the ſame Seed in the ſame Soil, but at a more proper Time.

Of the Damage that happens to Pea-crops by too late Sowing their Seed.—As I have juſt finiſhed my Thoughts of expreſſing Part of the Damage that frequently attends the Sowing of Peaſe too early; I now come to make Obſervations on the Damages that ſometimes happen to Pea-Crops, by too late Sowing; the chief Cauſe of which reſults from Droughts and Slugs: If from Droughts, it has the greater Power to hurt Pea-crops, when the Seed is ſown in a Chalk, in a Sand, or in a Gravel, which being all looſe, ſhort, light Earths, they give the Sun and Air a free Acceſs to their Roots; and, when the Peaſe are in their juvenile low Growth, their Stalks not having Length enough to cover and ſhade them, they often ſuffer even to the Loſs of moſt of the Crop, as wanting ſufficient Moiſture to forward their Growth; and, when they have received ſo great a Check as to be thus damaged, in their firſt and early Growth, they ſometimes never fully recover it, but, like a Pig, or other Animal, that is much ſtunted, while it is young, if it lives, it never makes ſo large a Creature, as its Fellows of the ſame Litter, that were better kept. This Sort of Damage, partly accruing by late ſowing Peaſe in dry Soils, is moſt obvious to all Spectators in very dry Summers, eſpecially in Bloſſoming-ſeaſon, when Pea-crops in ſuch Soils and Weather are not able to perfect their Bloſſoms for Want of Moiſture, and then the Crop is, in Part, or fully loſt. A Caſe that often happens in chalky Soils, not above three Miles Diſtance from my Houſe, as I have heretofore obſerved, where ſe-

veral of their Farmers are weary of ſowing Peaſe at any Time in this Earth, becauſe of this Damage that makes them ſuffer more or leſs in very dry Summers; and, therefore, in Deſpair of better Succeſs, they have ſown Oats, where Peaſe, by the Courſe of Sowing, ſhould have been the Crop; ſo powerful are the Effects of very dry Weather on Pea-crops ſown in theſe Soils, that, though the hardy Horn-grey Pea is ſown in them quickly after *Chriſtmas*, in order for their obtaining an early ſufficient Cover to ſhade their Roots, yet even ſuch early Sowing is not, in ſuch dry hot Summers, capable of preventing this Misfortune; much leſs when Pea-ſeed is ſown later than ordinary in ſuch looſe dry Earths; which brings me, in the next Place, to make Obſervations on the Damage of the deſtructive Slug. The Slug, or ſmall naked Snail, is a moſt hardy Inſect that breeds in and ſhelters itſelf in the Day-time under Clots of Earth, and in ſuch a Depth of it, as very much ſecures it not only from the Accidents of Weather, but alſo from the Deſtruction of the Plough's and Harrow's Operations. Dry, long, hot Seaſons are its Enemy, but nothing ſo much as vehement, ſharp, penetrating Froſts; nor is there any Thing ſo much its Friend, as warm moiſt Weather, which gives the Slug Ability and Opportunity to prey on Vegetables in a moſt voracious Manner; and, of all Field-vegetables, none is better beloved by them, nor harbours and encourages their Breed more, than green Pea-crops, becauſe of their luxurious Food, and the eaſy Acceſs they meet with to climb their couchant Stalks, Leaves, Bloom, and tender Pods. Theſe, I ſay, all of them contribute a full Subſiſtance to theſe Devourers, in moiſt warm Weather, by their horizontal Covering the Ground more than any other Vegetable, and thus prove the greateſt

Nurſery

Nurſery for the Slug. Now the Month of *March* being generally attended with dry Weather, and ſharp cutting Winds, keeps the Slug down in its loweſt Cell of the Earth; but, how far that lies from the Surface, I have ſomething elſe to do, than to give a particular Account of, or of the Dimenſion and Shape of ſuch Cells; I leave this to the ſublime Philoſopher for employing his Microſcope and exalted Learning, to meaſure the Decimal Parts of their Depth, *&c.* and giving a florid Harangue on the Place, the Breed, the Growth, and the Anatomy of the Slug; for my Part, it beſt ſatisfies me, if I can give an Account of the practical or the more uſeful Part of the Matter, which would be, if I can tell the Gentlemen and Farmers, how they may prevent their Breed of this arch Enemy; or, when he is bred, how to prevent his Miſchief to a Pea or any other Field or Garden green Crop, which two important Secrets I can impart, and warrant Succeſs, from thoſe many experienced Trials that have been made by a few Farmers who have reaped a very great Advantage by it; for, till this was diſcovered and made Uſe of, they never could be ſure of Turneps, Rapes, Peaſe, and other Field-crops being delivered from the powerful Damage of Slugs, Flies, Worms, and all other Inſects; but, by the Application of a certain cheap Ingredient, which is to be had almoſt every where in *England*, *Scotland*, and *Ireland*, theſe Slugs, Flies, Worms, and all other Inſects are abſolutely and infallibly kept from annoying Turneps, Rapes, Peaſe, Flax, Weld, or any other green Field or Garden-crop. A Secret, at this Time unknown to the moſt learned Societies, as well as Thouſands more that I could never have been Maſter of, had I not travelled in Queſt of them, and which Providence brought to my Knowledge;

an Ingredient, which, at the ſame Time it keeps off all Inſects from hurting young Crops in long rainy Seaſons, nouriſhes the Ground, and forces on a moſt expeditious Growth of them, and which I am ready to communicate at a reaſonable Satisfaction. But the dry Weather and the Slug are not the only Inconveniencies that attend a Pea-crop; it may likewiſe ſuffer by wrong Sowing the Seed.

How the right and wrong Sowing of Peaſe contributes to their good and bad Growth. — The wrong Sowing of Pea-ſeeds has been often fatal to their Crops, and, yet, this Misfortune frequently happens even to Farmers of long Practice; now the later Peaſe are ſown, the more hazardous is the Crop; and, therefore, it requires the greater Conſideration, how to ſow them in that Way which moſtly contributes to their Safety and Growth. I have before ſhewn, how an old Farmer ſowed his Pea-ſeed by ſtraining them into a Furrow out of a Man's Hand after the Plough, which were covered by the next turned-down Furrow of Earth, and ſo he proceeded throughout a Ten-acre Field: But this proved a wrong Way, as the Soil had but one Plowing in all, after a Wheat-crop, becauſe, it being of the gravelly Sort, the Ground, by Rains that quickly fell after Sowing, bound it down ſo cloſe, as hindered many of the Peaſe from puſhing out their young Spires; ſo that, in ſhort, the Farmer loſt moſt of his Crop by his ill Conduct, occaſioned, chiefly, by his uſing the Pecked-ſhare Two-wheel Plough, that his Ploughman could not help making ſo deep a Furrow, as buried the Seed, when a Foot-plough, or better the new invented Two-board Swing-plough, would have plowed a thin Furrow, which would have covered the Seed ſo ſhallow, as to have given its tender Shoots an eaſy Paſſage into the Air. This

is one Way to ſecure the Growth of Pea-ſeed in a dry Soil, by Reaſon it has a ſufficient Cover of Earth, to hinder, in a great Degree, the ill Effects of too much Drought. *Secondly*, Or the Pea-ſeed may be ſown Broad-caſt, and plowed in as ſhallow as poſſible, as is often done, where a due Preparation of the Ground has been before; I mean, where a *Chilturn* dryiſh Loam, a gravelly, ſandy, or chalky Loam has had two Plowings in all, one before, and the laſt at the Sowing-time, eſpecially where a Soil is any Thing of a ſtiff Nature, for then the ſafeſt Way is to plow it twice in all; for many have loſt their Pea-crop by being too preſumptuous, and plowing in the Seed on only one Plowing in; then comes, perhaps, a long dry Time, and prevents their Growth; therefore, all prudent *Chilturn* Farmers will give their Ground, if it is any Thing of a ſtiff Nature, two Plowings, not only to make it fine and looſe, for giving the Pea-ſhoots an eaſy Paſſage into the Air, but, likewiſe, for killing or preventing the Growth of thoſe Weeds, which would otherwiſe choak the Pea-crop. *Thirdly*, There is a Way to ſecure the Roots of Peaſe from Droughts, by plowing them into four Furrows, which either a Wheel or Swing-plough can make in the Form of a Ridge; and this we, in *Hertfordſhire*, generally do, where our Land is of a very ſtiff Nature, by Reaſon, when Peaſe grow in this Ridge-form, they lie in a pretty ſecure Manner from the Danger of Waters and Droughts, and more from the Power of the Slug; and, in all theſe three Ways of Plowing that I have mentioned, the Peaſe lie under a Cover of Earth, which helps to nouriſh them all the Time of their Growth, far beyond the common Method of only harrowing Pea-ſeed; a Way that is better done in *January*, *February*, or *March*, than in *April*; for,

for, if Peaſe were to be only harrowed in in this Month, and a very long Seaſon followed, it would greatly endanger the Crop, as being more expoſed to be deſtroyed by Droughts than in any other Form of Sowing whatſoever, for Want of a ſufficient Cover of Earth; and not only by Droughts, but alſo by Field-fowls, who, by the ſhallow lying of the Pea-ſeed, have a wide Opportunity to find out their beloved Food here, and devour great Quantities of it; which they will not fail to do, if Peaſe are ſown in this Month after a wrong Way. Now then avoid that old pernicious Way of only harrowing in Peaſe that are ſown Broad-caſt at this Time of the Year, and ſow them in a better Form.

Why large Peaſe and Horſe-beans cannot be regularly ſowed out of a Drill-plough, unleſs they are firſt prepared by an even Sorting of them.—This may ſeem an odd Article, at firſt, to ſome, but I ſhall give ſome Hints, that will prove it neceſſary, that both Peaſe and Horſe-beans ought to be firſt prepared, before they are ſown out of a Drill-plough; and that, becauſe the Seed-box as it is made to a Truth, for dropping out ſized Peaſe or Beans, the Seed cannot be dropped out of it in a regular Manner, that is, not pretty near of one Size, and eſpecially the larger Sort of Peaſe and Horſe-beans; for, when large Peaſe or Beans come into the Seed-box, bigger than others, it cauſes a Miſſing; that is, there will be many Vacancies in the Drill, by Means of ſuch Miſſing, that may be of very ill Conſequence to a Farmer, where many Acres are ſown in this Manner. Now the Peaſe, moſt liable to this Misfortune, are the Rouncival Sorts; as, the great Rouncival Maple, which by ſome is called the *Grey Pea*, and is the largeſt Pea ſown in *England*; the great blue Union-pea, the Non-paril, and others. Theſe, as they grow

in

in the Field, are of ſeveral Sizes; and ſo they are, when cut and carried into the Barn, thraſhed, and cleaned in the common Way of cleaning Peaſe; and then, in Courſe, they will be ſold in ſuch an unſizeable Condition in the Market and at the Seed-ſhop. The Horſe-beans are always ſold in the very ſame uneven promiſcuous Condition, ſo that there is no ſuch Thing as buying any of theſe large Peaſe or Beans in an exact Size for ſowing them regularly out of a Drill-plough, and then the Conſequence will be what the following Account will make appear.

How a Gentleman's Bailiff attempted to ſow Horſe-beans of an uneven Size, out of a Drill-plough, and what was the Conſequence thereof. — This happened I think in the Year 1742, in a certain Part lying about thirty-five Miles to the *Southward* of *London*, where a Gentleman's Bailiff attempted to ſow Horſe-bean-ſeed out of a Drill-plough; but he could not drop them out of it in a regular Manner, becauſe they were not all of a Size, which occaſioned the ſmall Sort to drop out ſooner than the larger Sort, and in a more irregular Order; for ſome of the ſmalleſt Seeds fell too thick into the Drill; and in other Places it was too thin; by which Means there were many vacant Parts of the Drills unſown. Now this Miſcarriage of ſowing the Seed regularly, is contrary to the Intent and Purpoſe of ſowing Seed out of the Drill-plough; for, by ſowing it with this excellent Inſtrument, all Seed ſown by it ſhould lie regularly at near exact Diſtances, and in an even Depth; and this becauſe if one Seed ſhould lie on, or too cloſe by another, as they both muſt get their Living from the ſame Fund of Earth, one will rob the other, and both bear (if they grow at all) weak Stalks and under-ſized Corn. But what is ſtill worſe, where the Seed miſſes Falling, there will be no Corn at all, only Weeds will come up,

and

and then in Courſe a Damage will happen to the Farmer inſtead of a Profit; both which Sorts of Loſſes, I am going now to ſhew how to prevent.

How to prevent the Damage of ſowing irregular unſizeable Pea and Bean ſeed out of a Drill-plough. — Neither by any ſpliced wooden Sieve, nor by throwing with a Caſting-ſhovel Peaſe and Beans in the longeſt Porch of a Barn, can any Taſker ſeparate the ſmall Pea, or Horſe-beans, from the larger, in ſuch a Manner, that they ſhall be all very near of one Size; and, unleſs they are, they can never, as I ſaid, be drilled in a true regular Sowing of them. This is well known to thoſe Farmers, who thraſh and ſow this Sort of large Seed in Drills. Not but I own, that by a long Throw, and by repeating ſuch a Throw, Peaſe and Beans may be made to anſwer pretty near of one Size, becauſe the ſmall ones will fall ſhort of that Length that the large ones will arrive at by ſuch a Throw. Yet ſtill there is no ſuch Thing to get the Seed of large Peaſe or Beans, by this Means, into ſuch an even Size, as an Inſtrument can that is made for this very Purpoſe; wherefore there was a Neceſſity for finding out a Way to bring this great Conveniency to paſs; otherwiſe, all Farmers and Gentlemen muſt be at a great Loſs to ſow regular Seed, and enjoy a regular Crop; as the Gentleman's Bailiff's Caſe was I have juſt been writing of, who, where he found, that the Beans miſſed Falling into the Drill in due Time, followed the Drill-plough and ſowed them out of his Hand, and thus ſupplied the Deficiency; for ſuch Deficiency muſt needs happen, becauſe by the Horſe drawing the Drill-plough in a conſtant Rotation of Pace, if ſmall Seeds drop out ſooner and thicker than large Seeds can, there muſt be different Vacancies and unſown Ground in the Drill, more than would be if the Seed was all or very near all of a Bigneſs, which muſt be ſupplied by an after-

after Hand-ſowing, if the Owner intends to reap or mow a full Crop of Grain at Harveſt; but how troubleſome, how irregular, and how uncertain ſuch a Hand-ſowing muſt be, the Sower will find, and the Crop will prove. Now, to prevent this great Damage that will happen by Sowing uneven Seed: The Gentleman, I have before mentioned, the World is very much obliged to, for inventing a very light and cheap Inſtrument that will effectually anſwer this great and profitable End of ſeparating the ſmall Peaſe and Horſe-beans from the great ones, for ſowing only the great ones. I have therefore this to advertiſe and inform all Gentlemen and Farmers, that I ſell and teach the Uſe of theſe light and cheap Inſtruments, for culling and ſeparating the ſmall Sort of Wheat, Barley, Oats, Peaſe, and Beans from the biggeſt Sort. One Inſtrument ſerves for both Wheat and Barley, another for Oats, another for Peaſe, and another for Horſe-beans. Thus all Gentlemen, who keep Ground in their Hands, and ſow it with Corn for Sale, and all Corn-Farmers, ſhould be furniſhed with theſe four Inſtruments, if they will be compleatly ſet up for outdoing all their neighbouring Farmers, in obtaining far better Crops of theſe Grains than they can, who ſow ſmall and great Seeds together promiſcuouſly. And, although theſe ſmall Inſtruments are made ſo light, that their Charge is but a meer Trifle; yet they have ſuch a Conveniency, that four of them will perform the Separating of five Sorts of Seed, the leſs from the greater Sort; whereas the great Seven-feet long, Thirty Pound round Wire-ſcreen, can only ſeparate two Sorts, and they are Wheat and Barley. I have alſo another ſmall Tool that prepares the famous Tick-beans, by ſeparating the ſmalleſt from the largeſt Seed, to a very great Advantage, for Setting in theſe croſs, high, wet, Vale Ridge-lands.

The great Benefit of Sowing the largeſt Seeds of all Kinds.—I think, I may ſay, I am the firſt Author that ever detected that abſurd wrong Notion of ſowing leaſed Wheat for the beſt Seed; a Notion that has reigned, Time out of Mind, among capital Farmers, and ſo it does, to this Day, with Thouſands; and I confeſs myſelf to have been one of their Number formerly, till I found myſelf in a palpable Error, by ſowing ſuch leaſed Wheat; which I was led into with the Multitude, on Account of its being free from the Stain of the Seeds of Weeds, that moſt other Wheat is infected with, little or more, notwithſtanding the Uſe of the Wind or Knee-fan, the Throw, the large upright Iron-wired Screen, and the Braſs-wired Rying-ſieve, which cannot deliver Wheat nor Barley from all the ſmaller Seeds of that pernicious Weed, called *Darnel*, &c. But the Remedy proved worſe than the Diſeaſe; for though we, by the Means of ſowing ſuch leaſed Wheat, get cleaner Crops than ordinary, yet we pay dear for it, by its returning ſuch a Number of weak Stalks, and lean Ears and Kernels, that the Wheat becomes ſo feeble, as not to be able to withſtand the Fury of boiſterous Winds, and the Preſſure and Weight of Rains; becauſe the ſmall underline Kernels, with which ſuch leaſed Wheat-ſeed chiefly abounds, occaſion a Feebleneſs in the Stalks, and a Return of ſmall Kernels, that are to be ſown again and again; for, you muſt know, that, when Farmers buy leaſed Wheat to ſow, it is always bought with an Intent to breed a clean Sort, that will ſell for the better Price at Market; but inſtead thereof we often get a Sort that ſells for a worſe Price; for the ſmall Kernels not only breed a feeble-ſtalked Wheat, but ſometimes Smut and Pepper-wheat, for Want of Strength at Root to produce a ſtronger Stalk and larger Kernel. From all which I infer, with juſt Reaſon, that, if the ſmalleſt

ſmalleſt Peaſe and Beans are ſown among the largeſt Sorts, ſuch ſmall Seed will produce ſmall Stalks, and they ſmall Pods and Grains, and few in Number. And, when this happens to be the Caſe, where is the Farmer's Rent to be made, when Peaſe and Horſe-beans ſell for leſs than two Shillings a Buſhel, as they did in 1743? Now by the Help of theſe cheap light Tools, or Inſtruments, a Farmer may get the largeſt of Peaſe, Beans, or other Seed, and, by ſowing them in Drills, they will be larger ſtill; for the Drilling-Husbandry carries this Perfection along with it, that it increaſes the Bulk of Grain ſown before in the random or promiſcuous Way; and, when this happens to be the Caſe, what will be the Iſſue? Why, ſuch a Farmer will not only ſell his Peaſe, Beans, or other Grain at Market, when his Neighbours cannot, but he will alſo ſell them at a far greater Price; and eſpecially when they are bought up for Seed, which theſe Inſtruments moſt excellently well prepare in ſuch a Manner, that no Wheat, Barley, Oats, Peaſe, or Beanſeed can (I believe I may venture to ſay) come up to it, by a conſiderable Degree of Goodneſs, that is prepared in the old common Way of doing it with the Fan, upright Screen, Throw, or Splintered, or Rying-ſieves. Here then I offer a Jewel to the World, and am the firſt Author that ever offered it; nor had I been able to do it, had it not been for the extraordinary Ingenuity and Generoſity of a moſt worthy Gentleman, a Stranger to me, to whom I ſent a Servant-ploughman, out of our Country, and who had an Author's Intereſt at Heart, whom he found endeavouring to do his Country all the Service in his Power; and I have this alſo to add, that, as I think I have made the great Utility of theſe cheap, light, little Inſtruments fully appear, by writing the vaſt Conſequence they are of, to the Intereſt of all Far-

mers and Gentlemen who occupy plowed Grounds; I here give Notice to all Perſons who are pleaſed to favour me with an Order to ſend them either of both Sorts of the Drill-ploughs, Horſe-break, and *Dutch* Hough, that it will be perfectly neceſſary that I ſend with them the Inſtrument for ſeparating the ſmalleſt from the largeſt Seed.

Of the great Pleaſure that drilled Corn yields to its Owner and Spectators.—— It is not only the moſt profitable Husbandry of all others, to ſow Corn in Drills, but it is likewiſe the moſt delightful and moſt healthful. It is the moſt delightful, becauſe the many Rows of Wheat, Barley, Oats, Peaſe, Beans, and artificial Graſſes, *&c.* that are ſown and grow in incloſed Fields, at ſtated Diſtances, give the Owner and all Spectators a ſpacious Proſpect of viewing their ſeveral various Gradations of Growth, from the firſt Sight of their infant Blades, or Sprouts, to the full ripe Ears and Pods. The firſt Delight is, in the Wheat-crop, when its young and branching Condition ſhews the numerous Stalks and Ears that each Root is like to produce; for then it makes the Owner, and it ſhould do all others Hearts glad, in Hopes its Youth will be crowned with a plentiful old Age; this they can plainly diſcern, and the better for the Corn growing thus in Rows by the Sides of large Intervals of cleaned bare Earth. The ſecond Delight is when the Grain is obſerved to get the Aſcendant of the quick-growing ſtruggling Weeds, which, by growing in Drills, it is moſt eaſily helped to do, with the valuable *Dutch* Hand-hough, and the moſt excellent Inſtrument that ever was invented for this Purpoſe, the Horſe-break, which in a very expeditious and cheap Manner may be made to eradicate the moſt ſtubborn Weeds that are; when his Neighbours Corn is eat up and choaked in a great Meaſure by them, that was ſown in the Random-way, becauſe

becauſe, in this Poſition of Growth, it is impoſſible for the Art of Man to overcome and deliver the Corn from the infinite Damage that many of their Tribe cauſe in ſome Sorts of Seaſons and Land; and then the Farmer ſtands with an aking Heart to ſee that Evil which he cannot remedy, and which is like to endanger his Crop being ſeized for Rent, that his weedy thin-growing Grain may be the ſole Cauſe of; as, indeed, it often happens to be the very Caſe of many ignorant, negligent, and poor Farmers, who might eaſily have prevented their Ruin, had they made Uſe of the Drill-plough, the *Dutch* Hand-hough, the Horſe-break, and the Separating-tool; from whence I take the Liberty to make this juſt Obſervation, That many Landlords are to blame, on this Account as well as their Tenants: The Firſt for not endeavouring to oblige, or perſuade them, to the Uſe of theſe profitable Inſtruments; and the laſt for not accepting their Advice; the one that he may have his Rent duly paid, and the other, that he may be certainly enabled to do it with Eaſe and Pleaſure. The third Delight, which drilled Corn affords, is to ſee it in its blooming, earing, and podding Poſtures; how the white, tender, trembling Bloom of the Wheat comes out from the many Joints of the green Ear, and this Day by Day for many Days together, while the glorious Sun and charming fine dry Weather are aſſiſting in its Breed; and in its Dying away, in the Formation of the milky Kernels, that afterwards ripen into hard golden Grain. But of this more hereafter.

CHAP.

CHAP. VIII.

The Copy of a Letter from an ingenious Gentleman to this Author.

THE genuine Copy of a Letter to the Author, ſhewing the ingenious Improvements a Gentleman made in his Eſtate, by the Directions of his Books.——

SIR, *October* 29, 1743.

I Am the Owner of a ſmall Eſtate at ————, three Miles from the Market-Town of ————, in the County of ————, of about 60 *l. per Annum*, Part in my own Hands, and Part of it let, in all about eighty Acres of Land of our large ———— Meaſure, which is eight Yards to the Pole or Perch, lying upon the Banks of the River ————, which parts this County from that of ————, and is a fine, dry, deep Haſle-mould (I think you call it *Loam)* and very level, about Two-third Parts Arable, and One-third Wood-land. Now, being fooliſhly fond of this Spot, I ſome Years ago threw down moſt of the old Fences, which were very irregular, cumberſome, and inconvenient (taking up much more of this good Land than I was willing to loſe) and have caſt the ſame into regular ſquare Cloſes, of about three or four Acres a Piece, by raiſing Cops, and planting the ſame with Quick, which now comes on to Admiration, inſomuch that one or two of the firſt ſet I ventured the laſt Winter to cut and lay down in the Manner you preſcribe in your *Modern Husbandman* for *January*, Chap. XII. Pag. 80, deſigning to go on with more; theſe Fences are clear of all Oaks as well as noxious Weeds, only

only I have planted at about eight Yards Diſtance ſome Apple-trees.

I have the Misfortune to be but too nice about this little Spot of pretty Land, and, being one of your conſtant Readers, I think, I may ſay ever ſince you appeared in Print, at leaſt ſince you obliged the World with your *Hertfordſhire Husbandman*, and *Timber-Tree improved*, by the Help of them, and all your other Monthly Books that come out, I have made ſuch Improvement of this little Eſtate, by Sowing ſome artificial Graſſes (Things which were never ſeen before in this Part of the World) Turneps, and ſeveral Years Crops of good Wheat (much better than many of my Neighbours) that I find it redounds to my very great Profit and Advantage; which my Neighbours obſerving, they now tell me my Land begins to look like a Garden, and are endeavouring to come into my Way; which, if there is any Thing of Truth in their Obſervations, I am ſure, it is altogether owing to your Goodneſs in obliging the World (and myſelf in particular) with your very uſeful and inſtructive Labours. But now, Sir, to come to the Point, I have long, with Pleaſure, taken Notice of the Drill-Husbandry, recommended and deſcribed both by you and Mr. *Tull*, in that very ingenious Book of his, wherein he hath ſo largely and ſo very accurately laid down Rules for that Sort of Husbandry, and making the Inſtruments to be uſed therein: But I cannot but be of Opinion (with Submiſſion to better Judges) that Mr. *Tull*'s Ploughs and other Inſtruments, though very well deſcribed in his Plates, and adapted to the ſeveral Ends they are deſigned for, yet, in both Conſtruction and Practice, I fear, they will be found too incricately nice and perplexed in their Performance. I ſpeak not this in Derogation to Mr. *Tull*, or his ingenious Contrivance; no, I ſhall always revere both him

and

and his Works, notwithſtanding the Efforts of his moſt malicious Enemies, who (to their Infamy be it ſpoken) neither have, nor, I believe, can confute him.

But apprehending both from him, and you, that the Drill Huſbandry grows more and more into Requeſt every Day, and in a little Time is likely to become the univerſal Practice of our Kingdom, I make thus bold (though a Stranger) to apply myſelf to you, who I find make no Diſtinction of Perſons, but are willing to anſwer all Letters and Queries from as well Men of lower Rank, as thoſe of higher Stations; I therefore, in the Number of the firſt of theſe, beg you would pleaſe to let me know the ſeveral Prices of the Three-wheel Drill-plough, the Pulley-plough, and your Horſe-break, being very deſirous to make Trial of their Uſe; and whether, if I ſend for them, you would be ſo kind as to procure, and ſend me along with them, an honeſt, good-natured, intelligent Servant, that well underſtands, not only the Uſe of the Inſtrument, but the different Management of the Land he is to uſe the ſame upon; ſuch a one I mean (or the ſame if you can) as you recommend in the Concluſion of your Monthly Book for *January*; and the Wages he would expect by the Year, which I ſhould in a great Meaſure refer to yourſelf to ſettle, according to his Merit. I can (without Oſtentation) ſay he will meet with a kind Maſter and Miſtreſs, and a well regulated Family. But I will conclude this too long Epiſtle, having incroached too much upon both your Time and Patience, and am,

Sir, your very humble Servant unknown,

J. L.

N. B. *I ſhall want ſeveral Things beſides the Ploughs, as ſeveral of your black Kerroon Cherries, Parſnip-Apples, Orange-Pears,* &c. *Pray what are they a-piece?*

The

The Anſwer of this Letter being too long to inſert here, I have omitted Writing it; and, ſince I ſent it, I have received another Letter from the ſame ingenious Gentleman near as long as this firſt, which I ſhall write a Copy of a few Leaves farther, with my Anſwer to the ſame; for where any Letter gives an Account of any Improvements, and partly how they are made, they may be as edifying to a Reader as a Chapter on another Subject in Huſbandry.

CHAP. IX.

Of the Improvement of Thetches.

Of Sowing Thetch-ſeed in this Month. — By Sowing of Thetch-ſeed in this Month, the Danger of Froſts is partly over, which ſometimes, by their extreme Severity, prove fatal to the moſt hardy Grain, among which, I take the Thetch to be one of the Chiefeſt; yet even this will *go* and *come* ſometimes, as we call it in *Hertfordſhire*, when it is ſown very early; that is, the Froſt will ſo check their Growth, as to near kill them, unleſs milder Weather happens in their Favour, and then they may recover. Thus we ſay, *a Thetch will go and come*; but ſometimes they are killed out-right, by very long and hard Froſts, inſomuch that ſome Farmers have been diſcouraged from ſowing them between *Michaelmas* and *Chriſtmas*, for Fear of their being thus deſtroyed; which Riſque may be intirely avoided by ſowing them in this Month, for Mowing them in Harveſt as a Crop of Corn; for it is not too late to perform this Work, provided the Soil be either a dry Loam, or a gravelly, or a chalky, or a ſandy Loam. In this Caſe a Farmer

may ſow Thetch-ſeed in *April*, not only for Mowing, as a Crop of Corn, but likewiſe to mow green for feeding Horſes and Cows in Racks, or for feeding on them in the Field, as we generally do: And likewiſe with our fattening and folding Sheep, as I have in laſt Month given a particular Account of. But, to bring all this to paſs in Perfection, the Soil ſhould be firſt well dunged, or otherwiſe dreſſed, in order to bring forward ſuch a late ſown Crop in due Time; for, if Thetch-ſeed ſhould be ſown on a poor Soil for theſe Purpoſes, the Conſequence very probable would be, that they will be too late ripe; and then as the Days are ſhort, and the Nights long, and the Stalks of Thetches commonly grow thick, and matted together; if a very fine dry Time does not happen for their Drying, they will be very likely ſpoiled for a Crop of Corn, as I have known done more than once. Again, when the Soil is firſt brought into good Heart, by Dung, or Top Manures, there may be expected a forward and full Crop; and the ſurer ſo, if warm Showers quickly ſucceed their Sowing; for, when their infant Progreſs of Growth is thus attended with a wet Seaſon, a timely and ſufficient Covering of their Stalks will ſo ſhade their Roots, as to protect them againſt the Damage of long and violent Heats.

Of the Sort of Thetch-ſeed that may be ſown in April.— Some ſow the ſmall *Lenten* Thetch, others the large Gore Thetch; the Largeſt fetch the moſt Money at Market, as being the propereſt Sort to feed Pigeons and other Animals, and are likewiſe beſt to ſow at this Time of the Year, for Mowing them in their green growing Condition, to give them in Racks to Horſes and Cows, or for feeding them and Sheep on them in the Field, becauſe their juicy Stalks yield the greater Bulk and Cover; but then the large Gore Thetch requires a richer Soil to grow in, than the ſmaller *Lenten* Thetch, and there-

fore

fore it is more than ordinary neceſſary to dung or otherwiſe dreſs ſuch Ground, on Purpoſe for nouriſhing a Crop of theſe large Thetches; but, for the ſmaller Thetch, ſome of the better Huſbandmen dreſs their Ground, and others not.

The Profit of Sowing Thetch-ſeed. — In the old and common Way of Farming, the Thetch does both *Chilturn* and Vale-Farmers a great deal of Service; but the *Chilturn* Farmer reaps the greateſt Profit of all by it; becauſe, as he is Maſter of ſeveral incloſed Fields, he can ſow ſome of them with Thetches, that otherwiſe muſt lie fallow the following Summer; and theſe in ſuch Order, that, by ſowing them at different Times, he can command both early and latter Crops of them. But what is likewiſe very profitable to him, he can employ his fallow Ground in the Growth of a Thetch-crop, and dreſs it with the ſame for a Turnep, or a Rape, or a Wheat-crop that is next to ſucceed. Here comes in a great Advantage indeed, even that which will ſupply the Charge of twenty Shillings each Acre of Ground, that otherwiſe muſt be beſtowed upon it to bring the ſame into Heart, to nouriſh ſuch a Turnep, or a Rape, or a Wheat-crop: Whereas if Thetches are fed off, or plowed in, they will ſufficiently do it alone. Now how ſuch a Feeding or Plowing is to be performed, to anſwer this, is the Queſtion? Why, Horſes will do this indifferently well, if grazed on them in the Field; Cows, worſe, and Sheep beſt; for Sheep, when fed and folded on them, leave the beſt of Dreſſing behind them. But to further explain this, I am to obſerve, that, when Thetches are big enough to feed Store-ſheep with in the Field, the Farmer begins to ſet up his Fold in the ſame, on Purpoſe to fold his Sheep that feed on theſe Thetches. This he fails not to do every fair Night after the Sheep have been fed on the Common, or other Field, about half the ſame

Day, and the reſt of it fed and baited in this Thetch-Field, till they get their Bellies full, for enabling them to dung and ſtale in a plentiful Manner: And, that theſe Sheep do no more Harm in the Field of Thetches than what cannot be helped, the Farmer acts the good Huſband, and runs a Row of Hurdles a-croſs it, to confine them to their due Bounds; that, when one Part of the Thetches are fed enough down, he moves them farther to give them a freſh Bite, and ſo from Time to Time till the whole Field is fed and folded over. Thus a Farmer enjoys a plentiful Dreſſing in the cheapeſt Manner poſſible, even to a double Profit, one by the Seed, and the other by the Dungs and Urine of theſe excellent Creatures Sheep; Creatures whoſe Excrements agree with almoſt all Sorts of Land, that thus may be improved to a very high Perfection both early and late: That is, this profitable Piece of good Huſbandry may be carried on from the Month of *May*, to near *Michaelmas*, by feeding down alternate Sowings of this Thetch-ſeed; which gives a Farmer early and late Opportunities of enjoying the Profit of their ſeveral gradual green Crops for his different Sorts of Cattle. If he is to feed his Horſes with them in the Stable, how valuable is a Field of them that is ſituated near Home? For then the Servant can mow them every Day, or every other Day, and bring them Home freſh for feeding his Team of Horſes with them, that will thus enable them, with a little Corn, to do a great deal of hard Work, and, at the ſame Time, keep them in pure Health; for the green Thetch, thus given, will keep their Bodies open, preſerve their Wind, hinder the Swelling of their Legs, and the Cracking of their Heels; prevent Farcies, Mange, and Surfeits; and, in ſhort, nouriſh theſe ſerviceable Creatures to that Degree, that with good Management they may be kept in good Fleſh, and in good Heart, while they

they labour early and late. So may Cows be fed with this excellent green Food in the ſame Manner Horſes are, even till the Thetch gets into its Kidding, or Podding Growth, and be given to them in the Cow-houſe, where they may feed on this luſcious green Meat, during the hot Summer Seaſon, and at the ſame Time be delivered from the Teaſings of the troubleſome, painful, biting Fly, and the ſcorching Heat of the Sun, which, when theſe Creatures feel in Exceſs, while they are confined in an open Field, it fatigues them to that Degree, as to leſſen their Quantities of Milk, that, in a conſiderable Number of Cows, muſt amount to a great Loſs; and altho' it may be objected, that this is a troubleſome and chargeable Way, thus to mow green Thetches, and give them to Horſes and Cows under Cover: It may be well anſwered, that, by a Farmer's ſo doing, he reaps ſeveral Advantages, which he would not enjoy, if the Horſes and Cows were fed in the open Field. For, *firſt*, by their being kept up in the Stable and Cow-houſe, they are prevented trampling down and ſpoiling almoſt as much green Meat as they eat, which both theſe Quadrupede Sorts generally do, by their Running about, endeavouring to free themſelves of their Fly Enemies. *Secondly*, the Farmer, by this Means, enjoys much more Profit by their Milk; for the ſucculent large Stalks of green Thetches are ſo juicy, when freſh cut, that they produce Abundance of Milk, while Cows feed on them in a Cow-houſe. *Thirdly*, they are hereby delivered from the Torment of aking Feet, which is a Misfortune inſeparable from thoſe Cows who are daily drove on hard Ground to diſtant Fields; for, by ſuch a Driſt, the Cattle's Feet are made ſore, even to a Lameneſs, by reaſon they ſometimes are cut by the Sharpneſs of Stones, or if not cut, the Gravel that they take in and lodge, will not fail to give them ſome Pain; and

then

then the Conſequence is, that ſuch a Cow falls off her Milk, and, withall, perhaps, to a great Degree of Loſs; a Loſs that I have too much experienced myſelf, while I was neceſſitated to drive my Cows to ſome Diſtance, before they could arrive at the Field of Graſs or Thetches; for Cows may be fed on the green Thetch, while it is growing in the Field, as well as Horſes; but, for theſe Reaſons, it is much better to feed them under Cover, if the near Situation of a Field will admit of it; and, if it does not, I am ſure that a ſmall Drift, whether it be on hard or ſoft Ground, will do them ſome Harm. *Fourthly*, Cows are, by this Means of Feeding them on mown green Thetches in a Cow-houſe, free of the Danger of Hoving, which is a Danger that all Cows are liable to, that feed on them in the Field; a Danger that expoſes a Farmer to the Loſs of all his Cows in one Hour's Time or leſs, if they feed on green Thetches in a wet Day, and in a high Growth of them, with a very hungry Appetite; becauſe their ſappy Stalks are then loaded with Liquor and Wind, which, if taken into their Bodies in too great a Quantity, may probably hove and burſt them. *Laſtly*, when either Horſes or Cows are fed daily with mown green Thetches under Cover, they will make Abundance of Dung, which though it is a ſoft Sort, and not ſo good as that produced by the Feed of Hay and Corn, yet it may be made to do the Farmer great Service, if he ſaves it in a right Manner, and applies it as well; that is, if he preſerves it from the Waſh of Rains, mixes it with harder Dungs, and lays it on gravelly, ſandy, chalky, or other dry, hot Soils, where ſuch cool, greaſy Dung will do moſt Service. And how precious a Commodity all Dungs are to a *Chilturn* Farmer eſpecially, who rents ſeveral Fields of hungry Soils at a great Diſtance from Towns, which incapacitates him to receive any Benefit from buying Dung,

Dung, ſo far off, when he thus enjoys it at Home in the cheapeſt Manner poſſible; which leads me to obſerve further, that there is no Piece of Husbandry in all the *Virgilian* or old Way of Farming, that exceeds this of Sowing Thetches, and feeding their green Crops off with Cattle kept in the Field, or Houſe; for, in either Way of feeding them, they do the Ground great Service, becauſe theſe, like Pea-crops, prevent the Breed of Weeds, and kill others that are old Poſſeſſors of the Field, by their great and cloſe Cover. They likewiſe, at the ſame Time, hollow the Ground to that Degree, that one Plowing of it afterwards for ſowing the ſame with Turneps or Rapes, or Wheat, will do where two would not, if a Crop of Thetches had not preceded their Sowing; and when a Crop of green Thetches are eaten or mown off the Land by *May*, or the Beginning of *June*, ſuch Land may, by only one or two Plowings at moſt, be brought into a fine Tilth, fine enough for receiving Turnep-ſeed of the forward Sort, or a late Sort; if the forward Sort are ſown, as the Seed of the *Dutch* Turnep, they may be drawn or fed off time enough to ſow the ſame Field with Rape-ſeed; and, after theſe are done, a Wheat-crop, or a Barley-crop, may be ſet on the ſame; and all this performed without the Help of carrying any Dung or Manure to the Field, provided ſuch Thetches, Turneps, and Rapes are fed off with Sheep; for by this Means the Ground will be full rich enough to carry forward any of theſe After-crops to great Perfection, becauſe the Weeds will be crippled, and the Land plentifully ſtored, and furniſhed with the nitrous Qualities of the Sheeps Dung and Urine. But the Profit of Feeding green Thetches is more than ordinary known to the Farmer that ſuckles Houſe-Lambs. Theſe enjoy their Benefit by their Ewes that feed on them in the Field, and, by this juicy Food,

Food, are capacitated for a long Time to give Abundance of Milk, that nouriſhes more than their own Lambs; for green Thetches will perform all this, when natural Graſs cannot, becauſe, when this is dried or burnt up by the violent Heats of the Sun, the green Thetch grows faſt, as being ſecured in its Roots by the Shade of its Stalks from this Misfortune; and, indeed, in this and ſome other Reſpects is of greater Value to a Farmer, than either Clover, Trefoil, or *St. Foyne* Graſſes; for, if theſe artificial Graſſes are fed down too cloſe by the Sheep, their Stalks will bleed, or ſpend their Sap ſo freely, as to cauſe their After-ſhoots to grow up weak and late, if not quite kill them; a Misfortune that the Farmer is not in danger of from his feeding a Crop of green Thetches; becauſe, when theſe are fed bare, he plows up the ſame Ground, and then there is an End of the Thetch-crop. This long Diſcourſe on the Profit of Sowing Thetches I write from the Field of Practice, becauſe I every Year ſow this Seed myſelf; and, what I have wrote of the ſame, is well known to be the Words of Truth, by thoſe Farmers who do the like. I ſhould now come to ſhew the Manner of ſowing theſe Thetches in Ridges and Broad-lands; but as I have, I think, done this ſufficiently in a former Month, it may be omitted in this.

Of Sowing Thetch-ſeed in Drills. — This may be very well done by the Drill-plough, by Means of having a Seed-box cut in Proportion to the Size of the Seed; but then the Perſon, who buys the Three-wheel Drill-plough directly of the Maker, may happen to be diſappointed in the right Management of this Piece of Huſbandry, for if the Seed is of an unſizeable Bigneſs, as moſt or all is of any Sort that is bought in a Market, the biggeſt Seed eſpecially, ſuch as Horſe-beans, Peaſe, and Thetches, cannot be regularly dropped out of the Drill-plough, unleſs

leſs the Seed is all of an even Size, as I ſaid; and, if it is not, the Conſequence will be an irregular Growth of the Crop to the Damage of the Owner; for it does not concern the Plough-maker to do any more than to make the ſeveral Pieces and Seed-boxes of this Plough of a regular Size; the Feat lies in the Preparation of the Seed, and, therefore as I have obſerved, no Throw, Fan, nor Screen, nor Sieve, in common Uſe with Farmers, can do this Thing like the ſmall Machine I am Maſter of, which I ſell at half a Guinea Price. Now if Thetches are to be fed in the Field with Cattle, or to be mowed green, and given them in Racks at Home; or if the Thetches are to remain in the Field to ripen for a Crop of Corn, ſtill the beſt Way of Sowing them is to do it with the Drill-plough in the Manner that I give an Account of in the Directions that I ſend with the Plough to the Perſon who employs me to buy it and ſend it him; which generally takes me up a Sheet of Paper, or more, to write on that and other Matters relating to this Three-wheel Drill-plough, *Dutch* Hand-hough, and Horſe-break, and which is ſo perfectly neceſſary to be done, that it is not reaſonable to ſuppoſe that they can be managed unleſs proper Directions are ſent with them.

CHAP. X.

The Copy of a ſecond Letter from the ſame ingenious Gentleman Mr. J. L. *to this Author.*

December *the* 2*d*, 1743.

SIR,

I Had the Favour of your moſt obliging Letter of the 9th of laſt Month, and am fully ſatisfied of the Fairneſs of your Terms about the

Ploughs, and am long ſince convinced of the great Uſefulneſs of their Performance; but am ſorry to hear there is not a ſkilful Servant to come along with them; for tho' I believe and hope the Inſtructions, you are ſo good to promiſe you will ſend along with them, may be full and ſufficient for the Purpoſe of uſing them, yet I am afraid it will be a hard Matter to bring over theſe obſtinate Humdrums from the old beaten Road of their Grandfathers.

Had I myſelf been ever uſed to Plough-holding, or been of Youth and Vigour ſufficient for ſuch an Undertaking, the great Regard, I have always had to every Branch of good Huſbandry, would have made it a Delight and Pleaſure; but being near entering upon my great Climateric, and, with the ingenious Mr. *Tull*, having for many Years been tormented with the Stone, Gravel, and other Infirmities (the natural Attendants on old Age) have rendered that pleaſant Part of Life almoſt impracticable, any farther than viewing and directing my Men, when they pleaſe to be directed in their Huſbandry. This pleaſant Path, together with Building, which I have likewiſe had a Share in (and I can ſay, without Oſtentation, not without ſomething of Oeconomy too) theſe two Things, I ſay, have moſtly taken up my Time for twenty or thirty Years paſt; ſo that at this Age, and under theſe Circumſtances, you will allow me to ſtand in Need of a good Aſſiſtant. I would therefore ſtill beg the Favour of you to recommend and ſend me a good Ploughman, if poſſibly you can; I mean ſuch a one as not only knows the Uſe and Handling of your Inſtruments, but alſo to convert and turn his Land to its various and proper Uſes and Purpoſes, of which I muſt own myſelf no great Adept. My Land is generally a good dry Haſle Surface, and pretty deep, only ſome few little Riſings that tend

a little

a little more to Gravel, but not without a Mixture of good Soil too; I have moſtly got it into broad level Lands, which I think you recommend as more proper for Drilling than the Ridge-lands are. As to the Servant's Wages, I ſhould leave it intirely to you to agree with him. The Ploughs might be ſent by Water to ——— where I could order them to be taken in and ſent up a new Navigation to—— eight Miles Diſtance from my Houſe, whereas —— is Thirty-one. If the Trees could not conveniently come along with them, I could order them to be taken in by the Carrier as he comes through *Dunſtable* in the Spring Seaſon, as you direct. As I always have and ſhall be a conſtant Cuſtomer and Admirer of your very uſeful Books, ſo I the rather hope for your Indulgence, and that you will excuſe this Trouble given you by, *Sir*,

Your moſt obedient humble Servant,

J. L.

P. S. I hope you will favour me with a Line at your Convenience, about the Servant; and then I will give you proper Orders about the Ploughs, *&c.* and order the Money to be paid you by a Friend in *London*.

The Copies of this Author's Anſwer to the forementioned Letters.

S I R,

IT is with great Pleaſure that I hear my Labours are attended with ſuch Succeſs, as to do my Country Service: For to this End and Purpoſe I have been at extraordinary Charge and Pains in travelling ſeveral Years to acquire a Knowledge, that I could not

poſſibly attain in the Country I live in. And altho' I never met yet with a ſuitable Encouragement for my Expences and Labours to ſerve my Country, by Reaſon it is not in my Power to make the moſt of my Writings; yet, as I take Delight in doing the World what Good I can, I the more eaſily diſpenſe with the Diſappointment. A Letter from a Gentleman acquaints me, that by the Deſcription I have given in my Monthly Books of Peat Grounds, and how to find them, he has diſcovered ſuch Ground in his Eſtate; and, having burnt ſome Quantities of it, its Aſhes have ſurpriſed all the Country about him, by their making uſe of them as a Manure according to my Directions, for increaſing Crops of Grain, natural and artificial Graſſes, Turneps, and many other Sorts of Vegetables, of which Sort of Diſcovery I am the firſt of Authors; and, how valuable ſuch a Diſcovery muſt be in Time to the King's Dominions, may be eaſily comprehended from the infinite Advantages that in Courſe will ariſe therefrom, both in Gardens and in Fields, as I have in Part given an Account of in my Works; and, ſince this Letter came to my Hands, I hear another Gentleman has had the like Succeſs, who was greatly reduced in his Circumſtances, but by this Diſcovery is like to be re-inſtated in his former ſplendid Condition. Another informs me, he has received a ſurpriſing Advantage by putting in Uſe my Salt-petre Receipt, that produced him ſix Quarters of Barley on an Acre of a wet, clayey, flat Soil, where three Quarters were deemed a good Crop; and in another County, by Vertue of the ſame *Menſtruum*, where they uſed to have, in a very dry Summer, but a Coomb, or four Buſhels of Barley on one Acre, their poor, ſandy Lands have yielded as many Quarters in ſuch a Seaſon. Another, that my excellent Receipt, for preventing the Rot of Sheep, ſaved his whole Stock in the Year 1735, that was thought to be the moſt fatal Year

for

for rotting Sheep known in the Memory of Man; a Truth vouched to my Face by no leſs a Perſon than a Member of Parliament, ſince deceaſed. Another that a Banking-plough I ſent him, is like to clear a Park of three Hundred Acres of Mole or Piſſum Banks, which are ſo large, that I hear they have been making more than a Century. Another on the Receipt of the Drill-plough, and Horſe-break, ſays, that he approves of them on firſt Sight, and admires them, as a moſt ingenious Contrivance; and ſo ſeveral others who have received great Benefits by Means of my Writings that have gone into the World.

The Copy of an Anſwer ſent to this ingenious Gentleman's ſecond Letter, by the Author.

Little Gaddeſden, 18 December, 1743.

SIR,

YOUR Letter of the 2d of *December* is with me, and I ſince have endeavoured to get a well qualified Ploughman for your Service, that might anſwer your Deſire; but it is not in my Power ſo to do this Time, becauſe I cannot engage one to my Mind; and I am the more timorous on this Account, leſt I ſend you one that will riſque my Reputation, as being not duly capacitated for your Buſineſs, for then it is doing you and myſelf Harm; which obliges me to write to you, that the Three-wheel Drill-plough is ſo cleverly contrived, that it will work the ſteadieſt of all Ploughs; inſomuch that it is apt to make the Ploughman careleſs, and let it be drawn throughout a very long Furrow, without his laying hold of its two wooden Handles, which Property of this excellent Plough is in Favour of a Noviſt Ploughman; becauſe moſt, if not all other Ploughs, require more Skill and Pains to hold

for

for guiding them right than this does, by Means of the Support of its Third Wheel. And altho' it has Three Wheels, wrung with Iron about two Feet Diameter each Wheel; yet it may be juſtly called a *light* Plough, lighter than the Two-wheel Turnwriſt-plough, the Two-wheel *Hertfordſhire* Fallow-plough, the Two-wheel Chip-plough, or Two-wheel Weſt-country Sull; and as the Seed is contained in a Hopper, that holds ſomething more than a Peck, there cannot well be any Miſtake committed in dropping it out in too little or too great a Quantity, or awry, by reaſon it is confined to a right and regular Diſcharge of it into the Furrow, immediately after the Share has opened it. There is here likewiſe leſs Danger in the making a ſtraight Furrow, than in the working of any other common Plough; for that the Hind or Fill Horſe is faſtened in a pair of light wooden Shafts that is always ſold and ſent with this Plough; and, if there is any other Horſe or Horſes to be added, they draw in a ſingle Length, and not double in a Breaſt, as ours do in our *Hertfordſhire* Wheel-ploughs. And as for ſhifting the little Seed-box, it is eaſily and preſently put on the round ſolid Iron Spindle, whether it be that for Sowing Wheat or Barley, or that for Oats, or that for Beans, or that for Peaſe, or that for ſowing Graſs or Turnep-ſeed out of it; and, when one of theſe is fixed on a Spindle, it is not to be taken off and ſhifted, till all the particular Seed is ſown by it; ſo that there is not that Difficulty in the working of this plain Plough, that, perhaps, ſome may apprehend; and therefore by ſuch plain Directions as I ſhall ſend with it, and your Judgment withal, I preſume a Ploughman of your own will be capable of managing this Three-wheel Drill-plough, Horſe-break, and *Dutch* Hand-hough to your Satisfaction.

The

The next Inſtrument, that I ſhall remark on, is the moſt profitable Horſe-break, which is ſo plain a Tool, that there is no Difficulty, I believe I may ſay at all, in underſtanding how to work it; becauſe, when this is to be made Uſe of, it is only taking off the Drill-plough from the Carriage, and faſtening it by a Swivel to the Horſe-break, which is done in a Trice; and then a Horſe draws it between the drilled Rows of Beans, or Peaſe, or Turneps, *&c.* to tear and looſen the interval Earth, that by the Earthen-iron is turned in an Inſtant on the Roots of Corn or other drilled Vegetables; for this Horſe-break, by its ſeveral light Irons, is of great Service, not only in Fields, but likewiſe in Gardens, where there is Room enough to work it, as being the very beſt Machine that ever was invented by Man for drawing between Rows of Nurſery-trees to clear the Ground of Weeds, making it fine and porous, and then laying it on their Roots; all which Three great Services this particular Sort of Horſe-break performs at one Draught-Motion, in the moſt eaſy, moſt expeditious, and moſt cheap Manner; ſo that a Gentleman, who buys this Inſtrument, is furniſhed with one of the beſt Conveniencies for improving his Garden-beans, his Rouncival Peaſe, his Savoys, his Cabbages, and many other Sorts of culinary Plants, by drawing this Horſe-break between their Rows once or twice in the Seaſon. Therefore, whoever ſends to me for this Horſe-break, they ſhould let me know not only the Uſe they intend to put it to, both in Field and Garden, or plowed Orchard, but likewiſe the Nature of their Soil and its Situation, that I may order one to be made according to the ſame; which is an Advantage any Perſon has by ſending for theſe Inſtruments more certainly than by ſending to the Plough-maker for them, who, in Courſe, would make

make them at random, for there are ſeveral Dimenſions of its Wood and Irons, and Faſhions of its Making.

A Third Inſtrument is the *Dutch* Hand-hough, that coſts about half a Crown or three Shillings; this is likewiſe of vaſt Service, when made Uſe of in cleaning the Interſpaces of the Land, between the Rows, or Drills, of Wheat, Barley, Oats, *Lucerne* Graſs, and ſuch like Vegetables; becauſe, when theſe are ſown in Fields, they are generally drilled in at twelve Inches Diſtance in Rows, which does not allow Room enough for drawing the Horſe-break between them; beſides, as all theſe have very tender Stalks and Roots in their green Age, they are not able to bear the Preſſure of ſo much Earth that muſt be laid near them, if the Horſe-break was employed, which a Bean, a Pea, and other ſtronger Vegetables can more eaſily endure, much leſs a Hough-plough. Again, by the Sowing of theſe ſmaller Seeds at a Foot Diſtance their Rows, there is the more Ground employed, and in Courſe more Corn obtained, than if they were ſown at a much wider Diſtance in Drills, for their being houghed by a Horſe-plough; and it was partly, I ſuppoſe, for theſe Reaſons, that the Horſe-hough-plough came into leſs Uſe and Reputation than formerly, becauſe it took up conſiderably more Ground to work in, than this *Dutch* Hand-hough, or Horſe-break, which ſupply the Roots of Vegetables with the Food of freſh Earth in a much ſafer and more profitable Manner.

The fourth Inſtrument is one that I have not yet particularly deſcribed in my Books, becauſe a ſingle Gentleman, about your Age, and of a Thouſand a Year Eſtate, lately invented it, and ſent it me by a Waggon, ſeventy Miles, as a Preſent, deſiring me, by no Means, to make it pub-

lickly

lickly known, that I might, with the more Aſſurance, enjoy its profitable Properties; which are, *Firſt*, It will ſeparate all the ſmall from the larger Kernels of Wheat and Barley, and likewiſe free them from the Seeds of Weeds, which neither the great upright Wire-ſcreen, nor any of the common Sieves, nor Fan, nor Throws by the Caſting-ſhovel can do: From whence ariſes this infinite valuable Conveniency, that a Perſon may, by this Means, obtain the boldeſt, largeſt, and cleaneſt of Seed; and then he has a ſure Reaſon to expect a Crop will yield a Grain of a proportionable Goodneſs to ſuch ſown Seed, and he thus become Owner of Crops of Wheat, or Barley, that none in the Country beſides can equaliſe; for this one ſingle Tool prepares the Seed of both theſe for Sowing in the greateſt Perfection, and, by this, he will not only ſell his Grain ſooner than his Neighbours can, but likewiſe for a greater Price. This is Fact, and what, I will engage, it ſhall perform, provided the Ground is firſt duly prepared by ſeveral Plowings, till it is got into a fine Tilth. How valuable then muſt ſuch an Inſtrument be, not only to all Gentlemen and Farmers who ſow more or leſs of theſe Grains, but alſo to the Nation in general, may be eaſily comprehended from the Account I have here given of it; for if all our Farmers can get larger-bodied Grain than heretofore they have done (which they may eaſily do) it will not only ſell for more Money at Home, but likewiſe Abroad, beyond any that is exported into foreign Parts by other Nations, that know not the Uſe of this Tool, or any other that can perform the like Effects. Thus *Great-Britain* and *Ireland* may receive infinite Advantages by the Uſe of this Tool; and, as Trade is the chief Support of theſe Nations, I hope, I ſhall hereby (as I have done in many other Branches by my

publick Writings and otherways) greatly contribute to my Country's Welfare. Now this moſt ſerviceable Tool is of ſo ſmall a Bulk as to lie almoſt in the Room of a Peck Loaf, and ſo cheap, that I can afford it among other Things that may be bought of me for half a Guinea Price; and, as it is ſo ſmall an Inſtrument, it may be ſafely carried to great Diſtances for the Charge of a Shilling or two, to pack it up between Boards, for defending it from Caſualties. This Tool, therefore, if you pleaſe, I will ſend with the Drill-plough and Horſe-break and *Dutch* Hand-hough, and then you will be compleatly ſet up to enjoy *multum in parvo*. But then, by all Means, the Knowledge of it ſhould be kept as private as poſſible; for, if it is publickly known, and others uſe it as well as you, you will not have the Benefit of it in ſo large an Extent as otherwiſe you may; yourſelf for Diverſion or Exerciſe, or a Man, or Boy, or Girl, or Maid-ſervant, may ſelect the beſt Seed by it; for this ſmall Tool is not to be uſed till after the Wheat or Barley is prepared for ſowing in the common Way of preparing it. And, if you are deſirous to oblige an intimate Friend with this Tool, I ought to have the Privilege of ſending it him; for, indeed, it is my juſt Property by the free Gift of a generous Gentleman, who, by falling in Love with my Books, was pleaſed thus to endeavour my Intereſt, and make me the ſole Proprietor of his ingenious Invention; and if other Gentlemen would do ſomewhat of the like, in any other different Manner, an Author, as I am, would be encouraged and enabled to ſend into the World ſuch future Works as would be of great Service to it; for I am not only forced to travel now and then, but to be otherways at great Expence, for obtaining thoſe

uſeful

uſeful Secrets, which elſe, perhaps, might never be known in Public.

I am ſorry to hear of your Affliction by the Gravel and Stone; I know a Gentleman of eighty Years of Age, who has partly preſerved himſelf from the fatal Effects of the Gravel, by Means of taking now and then as much ſcraped *Caſtile* Soap as will lie on a Shilling in warm Ale; for this Ingredient is well ſtored with the Salts of Vine-aſhes, and is of a moſt ſlippery Nature. I can tell what will prevent any Perſon's having the Wind-cholic, half a Year together, for Two-pence Charge; not that I pretend to the Knowledge of Phyſic, but to make known what I learn, confirmed by the long Experience of others and myſelf: And I adviſe you, for your Diſtemper, to drink, chiefly, a Table-beer made only with Treacle, or Moloſſoes, and Water; boil nine Pounds Weight of this in thirty Gallons of Water, without Hops, one Hour, and work it with Yeaſt. It is of a moderate opening Nature, and, therefore, very much prevents the Breed of the Gravel and Stone, and other Diſeaſes, too long to mention here; inſomuch that I have known ſome that dare not live, without the Uſe of it.

As you obſerve the Drill-plough and Horſe-break may be commodiouſly ſent you by Water to ———, and, as all the Inſtruments may be made in three Weeks, from the Time of my ordering their Making, they may be ſent you ſoon enough to ſow Beans, Peaſe, Barley, Oats, or Graſs-ſeeds; and, if you pleaſe, I will ſend you one Buſhel in all, to breed more from, of the biggeſt Sort of Peaſe in *England*, the grey Rouncival, an excellent eating Pea, both green, and when full ripe, with Bacon, Pork, or in other Forms; or, the great blue Rouncival Union-pea, or the Rouncival White Non-paril Pea, or a

Buſhel of each; for theſe will grow well, if drilled out of the Three-wheel Drill-plough, and afterwards horſe-breaked. Theſe I ſowed in Drills this laſt Spring, and had a good Return.

I have juſt been ſending Kerroon Cherry-trees, Parſnip Apple-trees, Beechen Sets, and white Elder-tree Cuttings, to two Gentlemen in the *North*; and I would adviſe you to let me ſend you a Quarter of a hundred of Kerroon Cherry-trees, by the Ship the Plough goes by, for they will coſt you but one Shilling a Piece, beſides Carriage; and, by a particular Way of packing them up, they will keep without Damage a great While. I am,

SIR,

Your moſt obedient humble Servant,

WILLIAM ELLIS.

P. S. I have juſt now met with a Ploughman Servant, who, I believe, will anſwer your Purpoſe. He expects —— a Year. I will have his Character from his laſt Maſter, and, if it is to my Satisfaction, he ſhall come ready qualified to hold the Drill-plough, Horſe-break, *&c.* Pleaſe, therefore, to let me have your ſpeedy Anſwer.

CHAP. XI.

Of Plowing.

OF the great Importance of timely and ſkilful Plowings.—— This Month of *April* is the firſt and moſt general Month in the Year, which is

is obſerved, throughout the *Southern* Parts of *England*, for Fallowing, or firſt Plowing up all ſuch Lands, the ſtiffer Sort eſpecially, that are to be ſown with Wheat, in *September* or *October* next. And, as this is the main Article in all the Art of Huſbandry, it requires the greateſt Care to obſerve; for many have been ruined for the Neglect, or the unſkilful Management of it. And, although it is of all this great Conſequence, yet, I am bold to ſay, that no Author of all the more learned Number than myſelf, has given a tolerable Account of it; for neither the Logician, nor Rhetorician, can here diſplay their Parts, without knowing the Field-practice of this ſuperlative Art. The moſt ingenious Mr. *Tull*, who has exceeded all Authors whatſoever, myſelf included, in Writing on the Drill-Husbandry, has hardly medled with the common Art of plowing Land, neither in *Chilturn* nor Vale-Countries; an Undertaking of great Difficulty, becauſe of the many different Soils that are to be plowed with various Sorts of Ploughs, proper to their ſeveral Natures and Situations, in the moſt convenient Seaſons of the Year. This Subject is ſo copious, ſo diffuſive, and ſo ambiguous, that, at beſt, I muſt profeſs myſelf a deficient Author in my Writing of it; nor could I do what I do, had I not travelled for improving my Judgment, by ocular Demonſtrations, as well as by the Converſation of Thouſands; which gives me ſome Reaſon to ſay, with Submiſſion, that I have expoſed many Branches of this excellent Art of Plowing, even more than any one before me has done. The Gentleman is above concerning himſelf in the practical Part of this Inſtrument, the Plough: The Farmer is the fartheſt of Men from diſcovering his Ways of managing it; and the Ploughman Servant the moſt of all out of the Queſtion; ſo that here

appears

appears little Room to expect this Art ſhould be publiſhed in Books, by a Practitioner of it, notwithſtanding the great and neceſſitous Reaſons there are for ſo doing; for it is undoubtedly the Duty of all true Subjects of the Common-wealth, to endeavour its Welfare, and contribute what conveniently lies in their Power towards making it a Land flowing with Milk and Honey; that is to ſay, with all Kinds of Plenty, that we may be able not only to enjoy this ultimate End at Home, but be capacitated to furniſh foreign Countries with our Commodities, that are chiefly raiſed from this famous Art of good Plowing, and which we can well ſpare as our Super-abundance, to the infinite Advantage of Trade in general. If Ground is not rightly and duly plowed, how can the Farmer get ſufficient Crops of Corn, artificial Graſſes, Turneps, Rapes, and many other ſerviceable Vegetables? And, if he has not full Crops, how can he breed and feed Cattle in Perfection? And, if this is not his Caſe, how can he become Owner of thoſe Quantities and Numbers of Things requiſite, in the firſt Place, to enable him to pay his Rent, to maintain his Family, and do his Country Service? In ſhort, was I to enumerate and diſplay the many Advantages accruing to a Nation from the Uſe of this excellent Inſtrument, the Plough, it would take up *Folio* Volumes to contain them, and I muſt ſhorten my Pen in this Place from enlarging ſo much as I otherwiſe would do.

Of the Difference of Ploughs, and why ſome are more proper to plow particular Soils than others. ——The many Sorts of Ploughs, now in Uſe in this Nation, ſhew the Neceſſity there is of employing a right one in a Soil proper for its Working; and, although ſome Ploughs have been made Uſe of Time out of Mind, in certain Places, as the beſt

beſt Sort that could be got and employed, as being believed to be ſuch, that none could be invented to exceed them; yet Time, Ingenuity, and Experience have proved ſuch their aſſured Opinion to be wrong founded, and convinced many Farmer, that others, lately diſcovered, have better ſupplied the Room of the old Ploughs; witneſs, the Two-wheel Jockey-plough of *Norfolk* and *Suffolk*, where, before this, they made Uſe of the Foot-plough; likewiſe, the Two-wheel Chip-plough, the Draught-plough, the One-wheel Plough, the Fen-plough, the Bobtail-plough, the Patent-plough, the Two-boarded Swing-plough, the ſeveral Drill-ploughs, and others that I could name; which are all, or moſt of them, new-improved Inſtruments, that perform their Work much better, than the old-faſhioned Foot or Wheel-ploughs; and it is from hence that I take the Opportunity of Remarking on the Benefit that ſome Farmers enjoy, in laying by the Uſe of a certain very large Two-wheel Plough; a Plough rather more weighty than the great *Weſt* Country Sull, and more poiſant and bulky than any of our *Hertfordſhire* Sort of Two-wheel Ploughs. This Plough, I ſay, ſeveral Farmers laid by for uſing a better one in their gravelly Soils, called a *Swing-plough*, made with two Boards on its Sides; one called, *the Mould-board*, lying in a ſtraight Poſture on that Side of the Plough *next the Land*, as we call it in *Hertfordſhire*; the other is a Bending-board, fixed on the Furrow-ſide of this Plough, which, by ſeven or more Notches in an iron Cock, at the End of the wooden Beam, is faſtened to the Geers, and them to the Cart-ſaddle on the Hind-horſe, by which it becomes a Swing-plough, becauſe it partly hangs on theſe Geers at Turnings at the Land's Ends. Now, this Plough may be made to be not only One-third Part lighter than the old Two-

Two-wheel Ploughs that were formerly uſed in its Stead, but it is to be drawn by Horſes in ſingle Rows and one in four leſs in Number than was employed to draw the Two-wheel Plough double in a Breaſt; which is a Conveniency of very great Service to a Farmer, for, by this Mode of Drawing, the Horſes go in the laſt Furrow, and thereby miſs Treading and Baking, as it were, the Ground down ſo cloſe, as to make the Plowing of the leſs Service. The next Conveniency is, that this Sort of Swing-plough will plough the Ground much ſhallower, than any Pecked-ſhare Wheel-plough can, and yet deep enough, upon Occaſion; when it is wanted to plow ſhallow, it is much to the Advantage of all ſuch Wheat, or Bean, or Pea, or Thetch-ſeed, that is firſt ſown Broad-caſt over the Land, and plowed in, becauſe, by this Means, if the Surface of the Ground was in moſt Heart, as it generally is, it is to the Benefit of the Crop; for, in Caſe Rains fall in a plentiful Manner after Sowing, the Goodneſs of the Top-earth will waſh down on the Roots of the Corn, and greatly nouriſh them; or, if very hot and dry Seaſons follow, the Roots will lie much ſecurer from the parching and ſometimes fatal Heats of the Sun, than thoſe from Seed only harrowed in. Another great Conveniency of this Swing-plough is, that, whereas ſome of the Two-wheel Sort of Ploughs, in working among ſtiff Loams or clayey Grounds, will carry along with them near half a hundred Weight of Dirt, which they gather up and lodge by its wooden Sheaf, its hind Staple, its two-mortaiſed iron Share, and other of its wooden Parts, ſo that the Horſes have a much greater Weight to draw through ſuch ſtiff wet Soils, Days together, and the Ploughman a much heavier Plough to guide, and Burthen to bear at the Land's End, while ſuch a Two-wheel Plough, thus loaden, is turning round

round at it, when great Part of this Fatigue and Damage is much of it avoided by the Working of this lighter Swing-plough, that by its two Boards is made capable of reſiſting the Lodgment of much Dirt or Stones, by Reaſon the two broad Boards fling them off, and leave them behind; ſo that this Plough works in light and clean Order, both for Horſes and Ploughmen, in any Sort of Ground it is uſed in. The next and laſt Conveniency, that I ſhall here mention of this excellent new-invented Plough, is, that it comes to little Money when made. The Wood, the iron Socket, Share, *&c.* and Making, amounting to no more than one Guinea in all; which is ſo ſmall a Price, for ſo uſeful a Plough, that, I think, none can well grudge to lay out this Money for an Inſtrument that will do all Manner of Work in gravelly, chalky, ſandy, and in dry, and wet loamy, or clayey Grounds. In ſhort, it is the moſt general Plough of all others that I know of, for Plowing in all Grounds, except in Ridge Vale-Lands, in Fen-Lands, in Marſh-Lands, and too ſtony Lands, which are Soils that require, each of them, one particular Sort of Plough. Now this cheap, light Swing-plough I furniſh to any Perſon for the Price before-mentioned, paying me for my Charges of ſending it him.

Of Plowing Ground in this Month, preparatory for ſowing the ſame with Turnep-ſeed hereafter. — This Diſcourſe is not writ in Behalf of the Vale-Farmers, who rent ſuch low, wet, ſtiff Land, as forces them to lay it up in a Ridge Poſture, for avoiding the Damage of Inundations of Waters; becauſe it is not to the Intereſt of thoſe to ſow Turnep-ſeed, for Reaſons I have heretofore ſhewn in my Works, altho' the ſame is ſo much in Favour of the *Chilturn* Farmer, that, next to Wheat-crops, I believe I may ſay, Turnep-crops are

the next chiefeſt Profit, becauſe they not only employ the Land the fallow Year, and lay it under a profitable Crop, while it would otherwiſe lie idle; but, by the Turneps being fed with Sheep, the Farmer obtains a Dreſſing worth ſometimes twenty Shillings an Acre; for ſuch Dreſſing oftentimes ſo enriches the Ground, that with a little more Help (and ſometimes it will do the Feat without any) it will return the Farmer an excellent Crop of Wheat, or Barley; but, as a full Crop of theſe is not to be expected, unleſs a due Preparation is made for the Turnep-crop, a right *Chilturn* Huſbandman takes timely Care to fallow, or, to be plainer, plow up his Bean, or his Pea, or his Oat Stubble in *November* for the firſt Time, in order to let the ſame Land lie to be improved by Froſts and Snows; for, if theſe happen in any great Degree, it will be much the better for it; the Froſts will ſweeten and ſhorten it, and kill the Weeds, which perhaps hereafter would greatly damage the Corn-crops, that are to ſucceed. The Snows likewiſe very much contribute to improve the Land with their nitrous Quality; but I muſt check my Pen here, and forbear Enlarging on this, for a more proper Opportunity, and ſay, that, after the Ground has been once plowed for Turneps, we commonly let it lie till this Month, before we plow it a ſecond Time, which is called the firſt Stirree for Turneps, in order to plow it a third Time in *May*, or *June*. But to be more particular in this my Account, of preparing Ground for a Turnep-crop, whether it be a gravelly Loam, a chalky Loam, an intire ſhort Loam, or a ſtiff Loam; I ſay, whether it be any of theſe, we in *Hertfordſhire* generally plow an Oat, or Pea, or a Bean-ſtubble up, the firſt Time in ſingle Bouts, a Form the beſt of all others, becauſe it lays the Earth up in the higheſt

Poſture

Poſture that a Plough can do it in, and thereby expoſes it to the Power of the Air, and conſequently to the Froſts in the moſt exalted Manner, for the Deſtruction of the Seeds of Weeds, and Shortening and Sweetening the Ground; which it ſeldom fails to do, becauſe it has a whole Winter Seaſon to do it in. Then, as I ſaid, in *April*, a judicious Farmer will plow it a ſecond Time, by bouting it again off the laſt Bouts; and then, I believe I may ſay, the whole Surface of the Land has been removed, or ſtirred to Perfection; yet that it may be made intirely fine and ſweet, in the next Month of *May*, this ſame Land is to be back-bouted, and thereby prepared for the Work of the Harrows, for theſe have not been made Uſe of all along; now, about the latter End of *May*, the Harrows are to be employed in harrowing the Earth plain, in order for the Farmer to lay on it his rotten Dung; which when ſpread all over the ſame, in *June*, he will plow it into the Ground, and then the whole Surface of the incloſed Field is ready to receive the Turnep-ſeed, that is to be ſown and harrowed in. Thus I have given one particular Account of the Proceſs of preparing an Oat, a Pea, or a Bean-ſtubble, for a Crop of Turneps. But there are ſeveral other Ways of doing it, according to the Nature of the Earth, and a Farmer's Fancy, which, if I was to write here, would take me up more Room than I can at this Opportunity ſpare; and, therefore I ſhall proceed to obſerve, that where a Farmer deſigns to get ſo early a Crop of Turneps, as to draw and ſell in *July* or *Auguſt*, or ſooner, he ought to prepare his Ground accordingly; which leads me to write on farther Particulars relating to Turnep-crops.

Of Sowing Turnep-ſeed in April, *for drawing Turneps to ſell in* June, *or* July. — To do this, the Soil ſhould be of the warmer, lighter, and drier

Sort; and therefore a gravelly, a chalky, a ſandy, or dry Loam ought to be the Land choſen for this Purpoſe; for, to bring this Deſign to good Effect, the Earth muſt be proper for it, as well as the Seed. Now, according to the Nature of the Ground, ſo ſhould the Plowings be performed; if it is a ſandy Soil, it ought not to be plowed ſo ſoon as *November*; it will be better done, for the firſt Time, in *February*, and again in *March*, for ſowing it in *April* with Turnep-ſeed, for this Soil is preſently made fine; if a Chalk, or a Gravel, they may be plowed, the firſt Time, in *December*, or *January*; if a Loam, in *November*, for ſeveral Reaſons I could aſſign; but I ſhall wave a Diſcourſe on theſe Soils, for another Place, and here take Notice, that when the Ground is duly plowed, and dreſſed ready for Harrowing in the Turnep-ſeed, the only Sort, for growing quick into a Crop, is the Seed of a *Dutch* Turnep, which, in a rich Soil, if the Weather is favourable, will grow into Turneps big enough to pull in leſs than three Months Time; and, as they, at this Time of the Year, run very expeditiouſly into ſuch a ſerviceable Size, their Skins will be thin, and their Inſide excellent, for growing in theſe ſweet ſhort Soils; much ſweeter, than thoſe that grow in ſtiffer Grounds, or where any others are loaded with a rank Dung; and, for this Reaſon, it is, that our *Hertfordſhire* Turneps carry the Bell, or Preference, at *London*; becauſe thoſe, that we ſend there, generally grow in a gravelly loamy Soil, firſt dreſſed by the Dung and Stale of Sheep, or by preceding Crops of Clover, or with Clay, or Peat Aſhes, *&c.* which are all ſweet Nouriſhers of theſe delicate, white-ſkinned, flattiſh Turneps. And, when a Farmer can get an early Crop of them, he enjoys the moſt profitable Opportunity of all others in ſelling them for the moſt Money;

Money; the firſt Turneps at Market make the Rarity, and that the greater Price; for it is both a great Pleaſure and Conveniency to eat theſe Turneps in *June*, *July*, and *Auguſt*. A Pleaſure, becauſe it is a very ſweet Sort of Turnep, when timely drawn and ſold; and no leſs a Conveniency both to the Townſman and Countryman, becauſe an early Turnep is generally the firſt cheap, ſerviceable Boiling Root, that all can make Uſe of; and this the Farmer in Particular experiences, when he can have them to boil in Harveſt-time, with his Bacon, Pork, or Beef. Thus I have given you a ſhort Account of ſowing Turnep-ſeed in the old Broad-caſt Way of ſowing it; which I have further and more particularly wrote on in my former Works.

Of Sowing Turnep-ſeed in Drills in this Month.— This Mode of ſowing Turnep-ſeed in Drills, I am ſenſible, is a new Piece of Huſbandry, known to few, and conſequently the Propoſal ſlighted by many; as almoſt all new Improvements are, till they, by many Years Experience, become Perſuaſives of Imitation. But, as I am an Author, it is not my Buſineſs to retard my Pen on that Account; for, if I can ſhew the rational Practice of a new Improvement, I think myſelf under no Obligation to forbear publiſhing it. And this of ſowing Turnep-ſeed in Drills, I am certain, is a moſt rational Invention, becauſe many Acres, I may ſay, great Numbers of Acres, that have been ſown this Way, have proved the profitable Effect of ſowing Turnep-ſeed in this Form; witneſs not only what that excellent Author Mr. *Tull* has wrote on this Head, and experienced beſides; but likewiſe what the late very ingenious Sir *John Dalrymple* mentions, in his Letter to me of ſowing Turnep-ſeed in Drills, which he ſays produced large

larger Turneps than he ever ſaw in *England*; becauſe, I ſuppoſe, he dreſſed the Ground thoroughly well in the firſt Place, and then drilled in the Seed in a right Depth, as you may obſerve by the Copy of his valuable Letter that I inſerted in my laſt Monthly Book for *March*. And I do ſay the like good Piece of Husbandry may be as well acted in *England*, as it was by him done in *Scotland*. His Turnep-ſeed, I ſuppoſe, was drilled in a ſtiff Soil, becauſe he ſays he drew the Turneps, and carried them into another Field, which I preſume was a Meadow, or drier Arable Soil, where the Sheep could feed on them in clean Order, without ſtolching the Ground, or daubing the Turneps; for Turneps ought not to be fed off by Sheep in very wet, ſtiff Land, becauſe it will help to rot them, inſtead of fattening them, if they are forced to feed on ſuch Turneps ſome Time; and therefore Sir *John* was very much in the right of it, to draw them out of this Soil, and feed the Sheep on them in a better; which not only contributed to the Health of theſe moſt valuable Creatures, but their Dung and Urine would better agree with a dry Soil, than a wet one. Now, to do this Piece of good Husbandry in this Month, ſow the Seed out of the Hopper of a Drill-plough, by a Seed-box cut purpoſely for the ſame Uſe; and, if the Earth is ſo ſtiff that it will not fall in of itſelf, immediately after the Seed for covering it, a light Harrow muſt be drawn over the Drills, and it will do it effectually. Thus you may ſow Turnep-ſeed in Drills at one, two, three- four, or more Feet Diſtance the Drills, by the Three-wheel light Drill-plough; and where it is thought proper, Rape-ſeed may be ſown in the Interſpace or Interval between the Drills, as Sir *John Dalrymple* did, to the higheſt Improvement of the Ground. And why Turneps thrive beſt,

and

and grow largeſt, and ſweeteſt, by being ſown in Drills, is eaſily made appear by rational Proofs.

Of Sowing Peaſe between the Drills of Turnep-ſeed. —— At the ſame Time that Turnep-ſeed is drilled in this Month, you may drill in blue Peaſe, or white Peaſe, in the Intervals of Earth; that is to ſay, after you have drilled in your Turnep-ſeed at four Feet, or more Diſtance, throughout the Field, you may, in the next Place, alter the Seed-box, by putting in that which is made to ſow a large, or ſmall Pea, and drill them in Drills made at eighteen Inches Diſtance, or as the Owner thinks fit, between the Rows of Turneps; by which Piece of Management, the Peaſe may be houghed at the ſame Time the Turneps are, if the Ground is in rich Order, and a kind Seaſon of Weather timely follows; and, as theſe two Sorts of Vegetables are ſown much at one and the ſame Time, they may, perhaps, be got off near the ſame Time, eſpecially if a forward Hotſpur whitiſh Pea is ſown among the Turneps; for then both Turneps and Peaſe may be ſo early cleared from off the Ground, that either a Crop of Winter Turneps may be had off the ſame, or a Rape-crop ſet on; or Wheat may be ſown in *September*, or *October*, to ſucceed the Turneps, and Pea-crops. This is Husbandry, indeed, and which may be carried on in a Thouſand and ten Thouſand Places, where they practiſe no ſuch Thing; nor can it be expected to be done, unleſs Gentlemen of brighter Parts, and heavier Purſes than Farmers have, lead the Way, and convince them by the only Rule of Perſuaſion, ocular Demonſtration, and Experience; for, indeed, it is the Intereſt of moſt Gentlemen, who are poſſeſſed of landed Eſtates, ſo to do; becauſe, by this, they will have their Rents better paid, as well as the Tenant ſecured from Breaking. The Example of Mr. *Clements*, Land-

lord,

lord, that I have formerly mentioned in my Works, making a Preſent of the Three-wheel Drill-plough to him *Gratis*, and ſending it him by the Sea three Hundred and more Miles, I ſhould think, might prove a ſufficient Incentive to many others to do the like; for, if his good Landlord had not found out and learned the great Advantage of this excellent Plow, it is very probable his Tenant had not enjoyed it in his Life-time, and then he would have been deprived of that valuable Opportunity of Sowing the ſame Field every Year with Corn, or artificial Graſs, or Turneps, without impoveriſhing the Ground, free of ſuffering the Loſs of every third Year's Crop, according to the common *Engliſh* Mode; which obliges a Farmer to leave it fallow that Year for Plowing the Land ſeveral Times, only to fine and ſweeten it for the Reception of a Wheat-crop, *&c.*

Of the great Service a Crop of Rapes is to a Farmer in April. — The Value of this moſt ſerviceable Vegetable is known to few Farmers in this Part, where I live; and therefore few, very few there are, that ſow the Seed of them, becauſe we lie too far from *London* to enjoy the Benefit and Advantage of them in the Manner that ſome do, who live nearer that Metropolis, and carry on the Suckling of Houſe-lambs. I know of none within a pretty many Miles of me, that ſow this Seed, beſides a Nobleman's Bailiff and myſelf. The Nobleman's Bailiff ſows it for his Maſter's Store-ſheep, for feeding his Weathers and Ewes in *March* and *April*, and I mine; for then we bait them a few Hours in Day in the Rape-field, as the only green Meat we have left, becauſe it is the Caſe of many to be without any other at this Time of the Year than this of Rapes, by Reaſon artificial and natural Graſſes, as well as Turneps, are generally eaten off before theſe Months. But the main

Deſign

Deſign of ſowing Rapes is to feed Ewes that ſuckle Lambs, either for fatting thoſe Lambs that are brought up in the Houſe, or the Field, and for the Service of the Kitchen. It is theſe Rapes that are of ſo hardy a Nature, as to withſtand the Violence of Froſts, beyond all the Garden Ware of this Tribe; when Cabbages, Savoys, Brockly, and the like were killed by the Vehemency of the Froſts, theſe have ſtood ſound, and ſupplied their Room, as ſeveral Acres of them did in the hard Froſts of 1739 and 1740; and, had it not been for theſe ſerviceable Plants, there had many Lambs been loſt; therefore, whether in froſty or open Weather, in theſe Months, the Rapes are of great Value, as being not only a moſt ſucculent Plant, that produces a great deal of Milk, but they likewiſe fatten Sheep and Lambs very expeditiouſly; ſo that no Farmer, that is Maſter of a proper Soil in a convenient Situation, ought to be without the Enjoyment of this excellent Food.

Of Plowing and Preparing Ground to ſow Rape-ſeed in.—— This Seed agrees beſt with ſtiffiſh or moiſt Loams, but it will grow well in dry Loams. The Management lies in the Sowing them accordingly. If Rape-ſeed is to be ſown in ſtiff, moiſt, or wettiſh Loams, the Ground ought to be ſowed betimes, even ſooner than this Month, for reducing its ſurly Nature into fine looſe Parts, by the Month of *July*, when this Seed ought to be ſown in the ſame, that the Rape-roots may enjoy good Part of the Summer's hot Seaſon for forcing them to take large Hold of the Earth, and get forward Heads againſt the trying Winter's froſty Seaſons; by this the Plants will meet with the beſt Security againſt hard Weather, and yet, for all ſuch a forward Sowing of this Seed, that Rape-ſeed, ſown in a dry Loam in the Month of *Auguſt*, is oftentimes as forward in its Growth, as that

ſown in a wet Soil in *July*. Therefore whether Rape-ſeed is to be ſown in *July* or *Auguſt*, in a ſtiff or drier looſe Soil, the Ground ought to be early and duly prepared, for the Harrowing this Seed in; and, as Rape-ſeed is commonly ſown on the fallow Ground, if it has not been plowed up before this Month, do it now, either by Broad-land Plowings or Bouting it into ſingle Bouts, or in what we call *Four-thoroughed* Lands, or in three or four Bout-lands, or in broad Ridge-lands. Theſe are all the beſt Poſtures that Land can lie in, that is of this ſtiff Nature, for the firſt Plowing of it, in order to get it ſweet and fine; for it cannot be too fine for this ſmall Seed; becauſe, in Caſe a Perſon was to attempt the getting a full Crop of Rapes in a ſtiff, ſowre, clotty Soil, if a great deal of the Seed is not buried ſo as never to grow, the Plants will be the longer enlarging their Roots, and getting a flouriſhing Head againſt Winter; and then, perhaps, when they are to be fed, there are only half Plants or Rapes; and what a Stunted Crop of Rapes, or any other Vegetable, yields, a Farmer knows by the Loſs he ſuſtains by his bad Husbandry; but this Seed is not always ſown in Tilth Grounds; for, where the Land is of a ſhortiſh, dry Nature, it is oftentimes ſown on Oat, or Pea, or Wheat, or Barley, or Bean Stubble on one Plowing only, and Harrowing in the Seed after Harveſt; and, when the Weather proves propitious, there are many good Crops of Rapes got this Way. But, for a more particular Account of this valuable Plant, I muſt poſtpone it for another Time.

Of Plowing and Preparing Land to ſow Wheat-ſeed in. — This Month of *April* is what we call the chief fallow Month of the whole Year, for fallowing up that Ground which is deſigned to be ſown with Wheat in *September*, or *October* next, and

and is ſo generally obſerved for doing this Work in, that both the Vale and *Chilturn* Farmer make it their conſtant Rule to plow their Land for the firſt Time in this Month, in order to prevent the Growth of Weeds, and get the Ground into a ſweet Condition, and fine Tilth, by repeated Plowings and Harrowings; and, for this Purpoſe, a *Chilturn* Farmer begins to plow his Pea, Bean, or Oat-ſtubble up in Broad-lands, if theſe Grains grew in Broad-lands before: And this he does for the better Preparing it to be plowed in ſingle Bouts, or in what we call *Four-thorough Stitches or Ridges*, the next or ſecond Time of Plowing; for, when Ground is to be plowed into one of theſe Forms, it is neceſſary that it be firſt made looſe, and ſomewhat fine; which may be done by ſuch firſt Plowing of it into Broad-lands, and then Harrowing well. Now the Reaſon, why it is ſo neceſſary to thus prepare it for Bouting or Four-thoroughing, is, becauſe, if a Farmer was to attempt to raiſe up the Earth by the Plough to lie in ſingle Bouts, while it is in a rough, clotty Condition, it would Part of it be apt to fall down again into the Water-Furrows; and that, which ſo falls down, cannot receive the Benefit ſo well of the nitrous Air, as that which remains laid up. The ſame, when the Earth is deſigned to be plowed into four thoroughed Lands; it cannot lie ſo compact, and expoſed to the Advantage of Air, if this Work is to be performed, while it is in a ſurly clotty Condition. But this is not the Caſe of the Vale-Farmer, nor the *Middleſex* Farmer; for neither of theſe plow the Ground in theſe two Forms: The Vale-Farmer is obliged to obſerve the feweſt Ways of Plowing his Ground of all others; becauſe he is confined to employ his Foot-plough only, and that in plowing his Land always in the Broad-land Faſhion, by *ridging it up*, or

caſting it down, as they here call it; and as their Vale-ground is generally of a wettiſh, ſtiffiſh Nature, the Farmer, that neglects to fallow it up, in this Month of *April*, ſtands an ugly Chance of loſing great Part of his Wheat-crop, by the Growth of Thiſtles, and other Weeds, and the Coarſeneſs of the Earth, for which Reaſon a Vale-Farmer is more than ordinary neceſſitated to plow up his Ground in this Month; for it indeed ſometimes happens, that, notwithſtanding all his Endeavours to get his Land into a fine Tilth, by ſeveral Plowings, he cannot do it to Satisfaction in a very wet Summer, which either prevents his Plowing the Land in due Time, or renders his Plowings the leſs efficacious; for, when it is plowed in wet Weather, or in a wet Condition, it is to little Purpoſe; the Horſes had better be kept feeding at Home all the while, and more to the Farmer's Profit, than working them in ſuch a Manner, becauſe they ſtolch, harden, and help to ſowre the Ground, which the Waters alone do too much. The next and laſt Obſervation that I ſhall make of Plowing in this Chapter is, that the *Middleſex* Farmer is near as much obliged to plow his ſtiff three and four Bout-Lands up in this Month, as the Vale-Farmer is his; for, in ſeveral Parts of this County, their Ground is not only of a clayey, or a ſtiff, loamy Nature, but it lies in a very flat and wet Situation; inſomuch that, in ſome particular Parts of it, they are obliged to keep up their Land in a Ridge-Vale Form, leſt the Inundation of Waters overflow their Corn. But the general Part of their Soils does not lie ſo bad as all this; that which lies drier, they plow and commonly ſow in three and four Bout-lands, which altho' they, in this Form of Plowing, lie not ſo high, as an intire broad Ridge-land, yet they are thus made, by the many Water-Furrows on their

their Sides, to lie dry enough to ſave the Corn that grows in them from the Damage of Waters, unleſs greater and longer Rains than ordinary happen. Here they commonly fallow in eight Furrows, or four Bout-lands, that they may the better next Time plow them in the very ſame Form again; for, by this Means, they break the Earth pretty well with their ſingle boarded Swing-plough, becauſe they remove moſt of it from its former Situation, and thereby ſhorten and ſweeten it. But notwithſtanding all their Efforts to bring their Land into a fine Tilth by *September* or *October* next, for ſowing the ſame with Wheat-ſeed: When a very rainy Summer happens, they ſometimes cannot bring this to bear to their Mind, by reaſon the Waters hinder their After-plowing in due Time; and, when they do, perhaps their Ground will be little or nothing the better for it; yet plow they muſt, if it be only to check the Growth of the Thiſtle and Couch-Graſs, which, otherwiſe may become the Farmer's Maſter. Therefore it highly concerns all Farmers, who occupy ſuch Soils, to begin their Fallowing, or firſt Plowing for Wheat, early in this Month of *April*.

CHAP. XII.

The Copy of a Letter from a Lord, to furniſh him with Kerroon Cherry-Trees.

SIR,

THE Earl of —— deſires you will ſend him ten *Kerroon* Cherry-Trees, by leaving them with Mr. *Matthews*, at the *Crown-Inn* in *Dunſtable*, who will pay you for them.

Nov. 7. 1743. *From your humble Servant.*

The

The Author's Anſwer to the ſame.

SIR,

ON the 9th Inſtant, I delivered ten *Kerroon* Cherry-Trees to Mr. *Matthews*, at the *Crown-Inn* at *Dunſtable*, and with them left a Letter to be ſent to you, giving an Account how I plant this Sort of Trees in Winter; but I think I omitted telling you, that, when theſe are planted, by leaving a Sort of a Baſon Form in the top Earth, you ought in *January* following to throw over all the Top of this Baſon Coal or Wood Soot to the Thickneſs of a Crown-Piece, and ſo once or twice every Year, and likewiſe on an adjacent Ground; for, by ſo doing, the Soot will give ſo great an Aſſiſtance to the Roots of theſe Trees, as to make them ſhoot more in one Year, than they would in ſeveral, if there was no more done to them, than what the Earth does they are planted in. Soot does alſo prevent the Harbour of Mice, and the Breed of Ants and other Inſects, which oftentimes either ſtunt the Growth of Trees, or kill them. The two largeſt Trees, in particular, I know will come to ſome Money for their Carriage, by reaſon of their great Weight; but, as they are well furniſhed with Roots, they will, if planted at firſt right in Virgin-Mould, and afterwards well looked to, return the ſecond Year ſome of the fineſt black Cherries, perhaps, in the whole World; a Cherry not only fit for the Table, but likewiſe for the Cellar; has a great deal of Fleſh in it, and that ſo firm, as to endure a long Carriage, when moſt others would ſpoil. Its delicious Juice is excellently pleaſant, when enjoyed directly from the Tree, and which Thouſands are Strangers to, who eat them at ſecond and third Hands; but its Wine is of ſuch a high, cordial, wholeſome Nature, that its nouriſhing, ſalubrious Qualities exceed thoſe of many other Sorts, when made

made in a true and artful Manner; an Art little known in the World; if it was known enough, there would not be ſo much Money expended as there every Year is in Foreign Clarets; for a Wine may be made from this great Black Cherry, that may nearly ſupply their Place, and give the Drinker great Satisfaction. I have been treated with this Wine at a Gentleman's Table, and at the ſame Time challenged to give it a right Name; for it was very difficult to know this from a *Barcelona* Wine, as he had made it; and, indeed, if this Wine, and a white and red Elder Wine, and white Currant Wine were made in their Perfection, and drank in common, inſtead of Foreign Wines, there would not ſo many die of Inflammations of Lungs, Gout, Gravel, and Stone, and other Maladies occaſioned by liberally drinking ſuch Foreign tartarous Wines and ſpirituous Liquors. Not that I recommend theſe *Engliſh* Wines, for their being clogged with a great deal of Sugar: I am ready to furniſh any Gentleman with the Cuttings of a peculiar white Elderberry Tree, that is of ſo ſweet a Nature of itſelf, as to want the leſs Aſſiſtance of Sugar; alſo with Cuttings of the white Currant-Buſh, or Tree, that is of an excellent Sort, as producing a very large and ſweet Fruit, capable of being made into a Wine little inferior to a ſmall *French* white Wine. If I had ſent a very ſmall Nurſery Cherry-tree, it muſt be ſome Years before an Owner can enjoy its Fruit; and therefore theſe large Trees are of the greater Value. I have likewiſe ſent a ſmall Parcel of Beech-Maſte, as a Preſent to his Lordſhip, which I fortunately had by me; for Mr. *Matthews* told me, my Lord wrote to him for ſome, but that he knew not where to get a Pint of this Seed for Money. But I ſhould think that a Thouſand of fine Beechen Sets of eighteen or twenty-four Inches long would alſo be very neceſſary to plant for the firſt Time, becauſe

becauſe theſe would arrive to a good Bigneſs ſome Years ſooner than the Maſte, and are of a much greater Certainty of Growth; and becauſe I could afford them at ten Shillings a Thouſand beſides the Carriage: And how valuable the Seed or Maſte of Beech is to Deer, Swine, Poultry, *&c.* they very well know that enjoy it in Plenty; which many do, who live in barren, chalky, ſandy, gravelly, and other poor Soils. I can likewiſe furniſh *May* Duke Standard, and ſeveral other Sorts of improved Cherry-trees, at one Shilling each, beſides Carriage to the Waggon or Ship; or Apples, Pears, and other Fruit-Trees; but, for the Orange-pear, I can ſend nothing of this Tree, but Grafts and Cyons; for I know of no ſuch Tree beſides my own in the World, that yields ſuch a large Golden Orange-coloured Fruit, that is always ripe in Harveſt, and is not leſs pleaſant, when eaten raw, than baked; for, when baked, it taſtes almoſt like a Sweetmeat, and for ſuch an early pleaſant Pear, to be enjoyed at this Time of the Year in a Pye or Paſty, is ſuch a Rarity to the Harveſtmen, that they exceedingly value it. I ſhould be very glad to be farther ſerviceable to his Lordſhip in any Thing that I can, as being,

Sir, Your moſt obliged humble Servant to command,

Little-Gaddeſden,
Novemb. 22, 1743. WILLIAM ELLIS.

I ſince received another Order from this Lord's Steward, for delivering 2000 Beechen Sets to Mr. *Matthews*, at *Dunſtable*, for his forwarding of them by the Waggon to the aforeſaid Earl; and I delivered them accordingly at ten Shillings a Thouſand, in *December* 1743.

The

The Copy of a Letter from a Duke's Servant to this Author.

S I R,

MY Lord Duke would be glad you would ſend as under by the —— Carrier, that will be at *Dunſtable* on *Tueſday* next in the Morning. Pleaſe to call on the Porter in —— *St. James's*, *London*, and he will pay you the Money, from

S I R,

Your moſt humble Servant.

P. S. The Waggon goes out but once a Week.

Black Kerroon Cherries } *one of each.*
Parſnip Apple-tree }
Slips of white Elder
Orange-tree Grafts
Lady-finger Graſs } *As much as can*
Tyne or Wild Fetch-graſs } *be had next Spring.*
Dumplin } *Grafts in the Seaſon.*
Gold Ruſſetin }

The Author's Anſwer to the ſame, ſhewing the great Profit of ſowing Sprat-Barley, and the Uſe of the Maſte-Draught-plough.

S I R,

I This Day delivered to Mr. *Tippet*, who keeps the *Half-Moon Inn* at *Dunſtable*, two Black Kerroon Cherry-trees, and likewiſe two Parſnip Apple-trees, with ſome Cuttings of white Elder, for the —— Carrier, to take up To-morrow. Theſe Cherry-trees are the ſame Sort, I lately ſent to *Dunſtable*, for forwarding them to the Earl of ——

which are ſo large, that his Grace will have Fruit on them in two Years Time, and the Pleaſure of eating a matchleſs Black Cherry. I likewiſe carried this Day two Thouſand Beechen Sets to the *Crown Inn* at *Dunſtable*, to be ſent to the aforeſaid Earl, that were moſt of them above two Feet in Length, well rooted, and juſt taken out of a poor clayey Soil, that qualifies them the better to grow and flouriſh in a drier one; and, if his Grace pleaſes, I will furniſh him with ſuch at a Shilling a Hundred, or eighteen Pence for larger, beſides Carriage, to *Dunſtable*. No Park, nor, indeed, incloſed Field, ſhould be without Beechen Trees in their Hedges, or planted on their Graſs Baulks, where the Soil will admit of their Growth, by Reaſon of the great Benefit their Maſte is of to Swine, Poultry, *&c.* And, as your Land conſiſts of Clays and Sands, the Maſte would be more than ordinary ſerviceable to Deer and Sheep, in preſerving them from the Rot; for the Oil, contained in the Beech-ſeed, is a ſingular Antidote againſt that and the Red-water. With us the Beech-tree thrives on a reddiſh Clay, as is apparent in thoſe that now are in *Aſtridge* Park, where the biggeſt Beech-trees now ſtand, I believe, that are to be ſeen in *England*: I can furniſh his Grace with white Wood Sets, for growing in wet, ſpewy Grounds, that are commonly at their Growth in fifty or ſixty Years Time; it is a whiter Wood than Deal, and therefore is preferred for making Shelves, Cupboards, Dreſſers, and other Houſhold Conveniencies, to the great Pleaſure of the good Houſewives, who delight to ſee theſe of the whiteſt Colour. If you have no Sprat-Barley, I can ſend you a Buſhel of this excellent Sort, by the Waggon, for increaſing it into large Quantities, and this from off either chalky, gravelly, or clayey Soils; for I, and my Neighbours, ſow it every Year, in various Sorts of Lands; if you have any Marſh Arable Land,

Land, or other very wet ſtrong Sort, this Barley will be a great Improver of it; for, by its ſtrong Straw, it will ſtand upright, when the common Barley will fall down, and ſpoil in ſuch rich Grounds. This is a Matter of great Conſequence, to thoſe who occupy ſuch Earths; becauſe, by this Means, they may become Maſters of ten Quarters of Barley on an Acre of ſuch Ground, when, perhaps, they would not have three Quarters from our common Barley; and, if this profitable Conveniency was more known, I am certain I ſhould have the more Cuſtom for it; but, at preſent, I am very ſenſible it is known to few, as well as Hundreds of other Things. I have been the more particular, in acquainting you with this Barley-ſeed, becauſe you lie on the Edge of a very wet Part of the Country, that contains vaſt Numbers of Acres of Marſh and wet ſtrong Earths, which would, if managed right, produce great Quantities of this Grain; and, for this Purpoſe, the Two-wheel, light, Draught-plough is made ſo ſtrong and clever, that it is the chief Plough made Uſe of in a certain County, for plowing their Marſh Grounds, preparatory for ſowing them with Corn; and not only Marſh Grounds, but I have ſeen ſpecial good Work performed by one of theſe in 1743, in fallowing up a very hard gravelly Soil, which it did, I thought, in an extraordinary Manner. This Plough, if you, or any of your Acquaintance, has Occaſion for, I can ſend one to him that ſhall be made in the greateſt Perfection, as being a moſt ſerviceable Inſtrument, not only for doing what I have been juſt mentioning, but likewiſe for performing ſeveral other valuable Works in the Plowing-part of Huſbandry. I am,

Little Gaddeſden,
13 December, 1743.

Sir, Your humble Servant to command,
W. Ellis.

The Copy of a Letter for ſending a Gentleman Ayleſbury *pirky Wheat-ſeed.*

SIR,

PRAY ſend me, by the Return of the Waggoner, a Quarter of your *Ayleſbury* pirky Wheat for a Trial of it; and, upon the Delivery of it, I will pay him for it, you ſending, by him, an Account what it comes to.

At your Leiſure, pleaſe alſo to ſend me ſuch Sort of Plough as you reckon beſt for a dry, loamy Soil, which ſhall be properly acknowledged by, Sir,

Your very humble Servant.

Direct to ——— Eſq;
at ———— *London.*
8th *November*, 1743.

The Author's Anſwer to the ſame, ſhewing the Management of improving Ayleſbury *pirky Wheat-ſeed.*

SIR,

ACcording to your Order I have ſent you *Ayleſbury* pirky Wheat-ſeed, that was brought up from the lower Parts of *Buckinghamſhire* two Years ago, and ſince ſown in the chalky Grounds of *Pitſtone* Pariſh, that lie a few Miles diſtant from my Houſe, which gives this Seed an improving Quality by the following Means: In the lower Part of *Buckinghamſhire*, there are Men who make it their Buſineſs to plow up Meadow Ground, (which was at firſt laid down for this Purpoſe) and ſow a clean pirky Wheat-ſeed in the ſame for a firſt Crop; by which they have a Return of a clean, plump, pure-bodied Wheat, free of Weeds, and all Manner of Soil, and larger than ordinary,

as

as it comes off a rich, ſtiff, blackiſh Earth. Now this maiden Crop, coming off new, broken-up freſh Ground, is ſaved on Purpoſe for Sale-ſeed; and accordingly is bought up by particular Men, who make it their Buſineſs to collect and buy it in large Quantities, for ſelling it again, to many Farmers in ſmall Parcels, for their ſowing it in various Soils in other Parts of the Country: Among which Number, ſeveral of my Acquaintance, who are Occupiers of chalky Grounds, punctually obſerve to buy this Seed every third Year, becauſe they ſow it no more than two Years before they get freſh again, in order to fit it the better for Sowing in contrary Earths; for no Change exceeds the Sowing of Wheat-ſeed from off a chalky Ground, on a ſtiff, loamy, or clayey Ground; and it is for this very Reaſon that great Quantities are every Year ſent from our Parts into the *Northern* Parts of *England*. I ſhall endeavour to furniſh you with a proper Plough that will beſt ſuit the Soil you have given me an Account of, who am,

Sir, Yours, &c.

Little Gaddeſden, 10*th November*, 1743.

Remarks on this Gentleman's Letter for furniſhing him with Ayleſbury *pirky Wheat-ſeed.*—This Gentleman has diſcovered himſelf to be Maſter of a more neceſſary and brighter Curioſity than any other, (except one) I have yet met with, in ſending to me for furniſhing him with a Quantity of this delicate Wheat-ſeed, that is to be ſent to his Eſtate for propagating its Species in a Part of the Country where it never was before. This is ſtriking at the Root of a moſt valuable Improvement, for it is not only to plow and dung Land, and fit it in the beſt manner for the Reception of Wheat-ſeed: There

There is likewiſe a neceſſary Proviſion to be made in getting ready a right Sort, that will beſt ſuit the particular Time of Year of ſowing, the Nature of the Soil, and its Situation. I will only mention one Caſe on this Account:—As a *Chilturn* Farmer cannot well pay his Rent without Crops of Turneps or Rapes, ſome, if not all his Turneps, or Rapes, cannot be eaten off time enough for ſowing the ſame Land with a *Lammas* Wheat, becauſe this Wheat growing on a long ſtrong Straw, and in a long Ear, where its Kernels ſtand the furtheſt a-part of all other Wheats, requires an early Sowing to ripen it in due Time; therefore after *October* we account it rather too late to ſow this Sort, leſt the Farmer loſe great Part of the Crop by it, becauſe, by ſuch late ſowing of this *Lammas* Wheat, it will, very probably, be too late in its green Ear, and thereby be the more expoſed to the Damage of Honey-Dews and Blights, for this Wheat, more than any other, is leaſt capable to reſiſt this Sort of Prejudices. On this Account, we have Recourſe to the great Conveniency of ſowing pirky Wheat, by reaſon this has a ſhorter Straw, and cloſer Ear; is a hardier Sort than the *Lammas*, for, by its low, ſlender Straw, and bunchy Ear, it is the better able to reſiſt Honey-Dews and Blights. Again, as Turneps are generally ſown on a gravelly, a chalky, ſandy, or dry Loam, and eaten off by Sheep, or Bullocks, the *Lammas* Wheat will not agree with ſuch dry, lean Earth, near ſo well as a pirky Sort; for a Loam beſt affects a rich, ſtiff Soil, to maintain its long thick Straw, and lank Ear, when a pirky Wheat will flouriſh on a leaner, and dry one, which makes it of great Value to follow a Crop of Turneps; and on this Account it is, that all over *Hertfordſhire* its Farmers make Uſe of hardly any other Sort to ſow after theſe Roots, and this very late in the Year; for I have

ſown

ſown it in the Beginning of *March* upon Neceſſity, and, as it happened, I had a good Crop, late in Harveſt: Not but I frankly acknowledge, that ſuch late Sowing was not good Huſbandry, becauſe it laid me under a greater Riſque than I willingly would have run; but, as I wanted to make up a certain Number of Acres of Wheat that Year, I ventured it. However, I have this farther to add, That, in *November*, *December*, *January*, and *February*, this pirky Wheat is often ſown after Turneps, and Cole or Rape Crops, and generally hits well, though not quite ſo certain as that more forward ſown. In ſhort, no Gentleman or Farmer, who ſows his Land with Turneps, or Rapes, ſhould be without this Sort of Wheat, for ſowing it to follow them. I likewiſe have further Occaſion to obſerve, that thoſe Gentlemen and Farmers, whoſe Lands lie more to the *Northward* than our County of *Hertford* does, are, in an eſpecial Manner, obliged to ſow this pirky Wheat in their Tilth Earth, in *September* or *October*, in their wettiſh, ſtiffiſh, Ridge, open-field Lands, and later in their drier Soils, after Turneps, or Rapes, for this hardy Wheat agrees as well with a ſtiff Earth as a dry Earth. But then here is this Caution to be, in a particular Manner, regarded: A Perſon may ſow pirky Wheat to little Purpoſe, if he does not take particular Care to have a right Sort of it; for, let me aſſure them, there is a great Difference in pirky Wheat-ſeed. Some is Rubbiſh in Compariſon of others. Some may be attended with the ſmutty, ruinous Quality; others with Pepper-Wheat; others with Darnel, and ſmaller Seeds of Weeds; others with underline Corns, and others from growing in an improper Soil, for ſowing it in another it is wanted for. Theſe malignant Incidents ought to be moſt carefully avoided, if a Perſon

Perſon intends to ſucceed in ſowing this beneficial Wheat-ſeed; and therefore a few Shillings extraordinary are far from being flung away, for enjoying a true, pure Sort of clean pirky Seed. On the contrary, it is ſome of the worſt Money kept back of all others, that ſhould be expended in the Management of a Farm; becauſe, as a Perſon's Seed is, ſo will his Crop be, and ſo will his Profits ariſe. This leads me to obſerve, That, on the 25th Day of *December* laſt, 1743, I received a Letter from Colonel *Willis*, one of the chief Planters in *Virginia*, for ſending him over four Sacks of four ſeveral Sorts of Wheat-ſeeds, for ſowing them in his various Soils, with Orders to get them at any Price I ſhall think fit to give. This diſcovers a great Genius in this Gentleman, who, by this his extenſive Commiſſion to me, ſhews he is ſenſible, that the beſt Wheat-ſeed is the cheapeſt of all others, though it coſts more than the common Sort ſold in Markets; and, that a Wheat-ſeed may anſwer this Character, it muſt be a bold, full-bodied Sort, and a clean, dry Sort, free of all Soil from Seeds of Weeds; that which has been lately thraſhed out, and that comes off a right Soil for ſowing it in another. This Gentleman, though a perfect Stranger to me (for I am only known to him by my Books, which, he ſays, have given him ſo great a Pleaſure, that he has thus ſent to me for theſe Wheats) may juſtly upbraid the Indolence of many of our *Engliſh* Occupiers of Arable Lands, who, notwithſtanding they poſſeſs various Soils in their Eſtates and Farms, yet are not prudent enough to furniſh themſelves, like this Foreigner, with Wheat-ſeeds proper for them, and therefore are incapacitated for enjoying thoſe Profits which otherwiſe they might do, by ſelling their Corn at Home, and at foreign Markets, for the greater Prices; as this Gentleman will be ſure to do, who has informed

formed me, by his Letter, how he improves his Land, by planting Tobacco, and ſowing Wheat.

CHAP. XIII.

Of Rolling Corn.

THE Benefit of Rolling Corn in April. —This is an ancient *Virgilian* Piece of Huſbandry, moſt neceſſary to be performed in this Month, both on Vale and *Chilturn* Corn-grounds, whether they be Barley, Peaſe, or Beans, *&c.* for the ſeveral Reaſons following. *Firſt*, to ſecure them from the deſtructive Slug. *Secondly*, to prevent the Damage of long and violent Droughts. *Thirdly*, to nouriſh the Corn-Roots; and *Fourthly*, to make them ſtand faſt. *Firſt*, to ſecure a Crop of Corn from the Slug. The Slug, or naked Snail, though a ſmall Inſect, is the moſt miſchievous of all others to Corn-crops, eſpecially to that of Peaſe; for theſe are the moſt natural and moſt delicious Food of all the Field Kind to them, and therefore they remain feeding on them longer than any other, for the Slug attacks the Peaſe from their infant Growth till they are in Pod; and on this Account it is that a Farmer, in the random Way of ſowing Peaſe, cannot be ſure of a full Crop of them, till they are paſt the Slug's Power to hurt them; which keeps many Farmers under a panic Apprehenſion of the Loſs of their Pea-Crops, or ſome Part of them, by this ravenous Inſect; for the Rapine of this ſmall Creature is committed chiefly in wet, warm Weather, that frequently happens in this Month of *April*, which aſſiſts the Slug not only in its vigorous Feeding, but likewiſe in its Breeding, by laying its ſmall Eggs in little Cells, under Clots of Earth; and when the Weather is thus favourable to the

Breed of this ſlimy Inſect, their Increaſe in a ſmall Field is infinite, and endures Years together, if the Seaſons are mild: That is to ſay, if a wet, warm Summer and a mild Winter ſucceed each other, then the Slug remains in Safety, and keeps his Poſſeſſion till the next Spring Time, when he is ready for renewing his wonted Rapine. But, in caſe a very hard Winter happens, then the Farmer ſtands a hopeful Chance of being delivered from thoſe his arch Enemies, who, although they lie too deep for being deſtroyed by the Tines of common Harrows, yet a ſevere and long Froſt will ſometimes penetrate into their Beds, or Cells, and there deſtroy both them and their Eggs, as it happened to them in the Winter 1739, and in the Spring 1740, which was ſuch a hard and long Froſt, that it rived, or ſplit, many Oaken Trees, or rather burſted them, by ſwelling their Sap into an icy Subſtance, and, at the ſame time, entered the Earth ſo deep as to kill moſt of the Snail or Slug Tribe, common Worms, Darrs, and Canker-worms, inſomuch that our Crops of Corn have hardly ſuffered by them to this Day. But when theſe Inſects live in great Numbers, in Weather ſuitable to their Nature, they become the greateſt Field Peſt of all living Creatures, by annoying, and ſometimes ruining Corn, Turneps, artificial Graſſes, and other Vegetables, both in Gardens and Fields; and what very much chagrines the Farmer is, that he cannot deſtroy them with all the Art he is Maſter of. Lime, indeed, will do a great deal towards it, but it will not fully anſwer his Purpoſe; for, if To day he ſows his Lime over a young Crop of Peaſe, Turneps, *&c.* perhaps the ſame Night, or next Day, great Part of its Efficacy may be loſt by the Fall of great Rains: Or, if a Courſe of dry Weather ſhould ſucceed, then very likely the Lime will ſerve to burn up the infant ſprouting Grain, as young

young Turneps, Clover, Flax, Wold, Peaſe, and other green tender Vegetables: And if he ſows Soot inſtead of Lime, or Tobacco-duſt over them, he may chance to ſhare the ſame Fate; and ſo of any other hot powdered Manure. Wherefore, to prevent theſe deſtructive Miſchiefs, as well as the Farmer can, he makes Uſe of the common wooden Roll, eight Feet long, fixed in a Frame, and drawn by one or more Horſes: The hindmoſt being faſtened in a pair of wooden Shafts, for the more ſteady drawing, and turning it at the Land's End, and bringing it through narrow Gate-ways, that lead from one Field to another. Here we roll the Corn that lies in Broad-lands, and in Ridges, commonly twice in a Place, to cruſh down and kill the Slug; and, for doing this Work the more effectually, a good Huſbandman will begin to roll his Ground at Peep of Day, for drawing the Roll along the Lands, while theſe Inſects are in their high Feeding; for, if he defers this Work later in the Morning, the Slug (eſpecially if the Weather is dry) will quit the Surface, and creep into the lower Earth for ſheltering themſelves, and lying ſafe from Accidents. This Caution, therefore, ought to be well regarded by all concerned in rolling of Corn-crops, for one Hour's Time, in the Fore-part of the Morning, is better than three afterwards, for killing Slugs, by the Preſſure of the heavy wooden Roll. *Secondly*, the Roll ought to be made Uſe of to prevent the Damage of long Droughts, which may prove fatal to Crops of Corn, by drying and parching their Roots, while they are in their Infancy; becauſe then the Sun and Air have free Acceſs to them, and, being in their thready Condition of Growth, the Heats may very eaſily enter, dry the Earth about them, and do that Miſchief, which, perhaps, can never be recovered. Now, to prevent this, a good

Farmer, in due Time, will roll his Horſe-beans, his Thetches, his Peaſe, his Barley, or other Crops, that generally want Rolling in this Month, by cruſhing down, and laying even, the clotty Earth on the Surface; which, though it did ſome Good before, by breaking off the Guſts of cold Winds from the Corn-roots, yet now becomes neceſſary to break them down, by the Preſſure of the Roll, for laying the Surface level, for the Operation of the Scithe hereafter, and for ſhading and ſheltering them from the Power of long and dry hot Seaſons. *Thirdly*, by cruſhing down the clotty Part of the Surface with this wooden Roll, and laying it even, the Corn-roots receive a Sort of ſecond Dreſſing; for, when the Earth is thus ſqueeſed about them, the Rains will waſh out its ſaline Quality on them, nouriſh them all the Summer after, and by this Means aſſiſt a ſcanty Manure, that was laid over the Crop at Sowing-time, and further increaſe the fertile Effects of a rich one; as is obvious to all Farmers, who practiſe the good Huſbandry of uſing the Roll in this Manner; and more eſpecially ſo, if a dripping Summer ſucceeds this profitable Work, for then we ſeldom fail, by this Means, to ſee our Crops grow and flouriſh in large Stalks, Pods, and Ears, that give us the greateſt Hopes of enjoying a plentiful Harveſt. The contrary Effects of this Management are eaſily perceived, when it ſo happens, that a Farmer is put by his Intention of rolling his Corn in due Time, as it now and then happens to be his Caſe, by the Fall of heavy and long Rains, that hinder his doing this Work; for, if he was to roll his Corn in ſuch Weather, the Horſes Feet would be apt to ſtolch, cruſh down, and bruiſe, or bury many of the Corn-ſtalks, or Blades, to the utter Spoiling of ſome of them; therefore it muſt be dry Weather, whenever this Work is performed. But, if this Happineſs is not

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to be enjoyed before the Stalk and Blade are got too old for the Purpoſe, then the Rolling-part had far better be let alone, and the Farmer remain content to ſee the Want of that he cannot have; which, very probably, will cauſe him the Sight of a languiſhing Crop of Corn. *Fourthly* and *Laſtly*, by rolling Corn, the clotty ſurface Earth is ſo faſtened on, and about its Roots, as to enable the Stalks to ſtand erect, for receiving the benign Benefits of the Sun, Air, and Rain, in Perfection; for, when they grow in this Poſture, the Sun and Air have a free Paſſage between their many upright Stalks, that thus ſerve to ripen them with the greater Expedition, becauſe the aerial, warm Influences have Room to harden them, and cauſe the Stalks and Ears to perform their regular and ſafe Bloſſoming, and Blooming, without which there can no right, full Crops of Corn be reaſonably expected; for, when the Stalks of Corn are, by heavy Rains, ſtrong Winds, and for Want of rolling the Ground, forced to fall down, ſuch Crops cannot enjoy a right Bloſſoming, or Blooming; and then, I am ſure, they cannot be well corned. Again, there is this Caution alſo to be obſerved in the Rolling of Corn; where Barley, or other Grain, has not been rolled before Spindling-time, it ſhould, by no Means, be rolled then; for, if this was to be done, it may, perhaps, bring on the Loſs of almoſt a whole Crop of Corn, becauſe, if its Stalks are got ſo ſtrong as to grow upright in a tolerable Heighth, and the Roller be then drawn over them, it will conſequently ſqueeſe them to that Degree as to make them *bleed*, as we call it; that is, it will bruiſe them ſo as to force out Part of their Sap; and then, as the green Stalks loſe that vital Part which ſhould nouriſh and carry on their Growth, they muſt be ſtunted, if not killed. And although one would think, this Caſe needs no Advice to caution againſt it,, yet I have

have known ſome topping Farmers commit this egregious Miſtake, to their great Damage, without perceiving their Folly, till it was too late, and ſome not at all; for, being ignorant of the Damage that ſuch late Rolling may cauſe, when they ſee a Barley-crop ſtunted, they are apt to impute it to a wrong Cauſe, and not to the right one, of the late Rolling of their Corn in its ſpindling Condition. I knew a Yeoman, who was Owner of a Hundred a Year, a fine Farmer, that was brought up to Huſbandry Buſineſs all his Life, be guilty of this very Miſtake; who went on, committing it Year after Year, till at laſt he had ſo much Damage done, by rolling his Barley at an unſeaſonable Growth, as opened his Eyes, cauſed him to perceive his Error, and become his own Monitor, as well as to other Farmers; for he frankly owned he acted wrong in rolling his Barley (in particular) too late, even when it had arrived to its ſpindling Condition; but, for a more exact Account of rolling Arable Grounds, ſee my Book, intituled, *New Experiments in Huſbandry* (at Page 16) wherein you may find ſeveral Matters I have not here mentioned. As to the Rolling of Graſs, or Meadow Grounds, I have wrote on it in laſt Month, and therefore ſhall omit it here.

CHAP.

CHAP. XIV.

Of Hedging.

Of Plaiſhing Hedges in April. — Although this Month of *April* is the laſt Month in the Spring Seaſon, that admits of Plaiſhing Hedges, yet no prudent Farmer will have this Work to do now, unleſs mere Neceſſity forces him to it. Neceſſity, it is true, may happen upon two Accounts: One, by long Froſts, Snows, and Rains; the other, by Multiplicity of Buſineſs, and Scarcity of Hands. All, or Part of theſe Reaſons, may be the Cauſe that he is forced to cut and plaiſh Hedges in *April*, if the warm Weather has not rarefied the Sap of the Wood, to the Degree of what we in *Hertfordſhire* call *Boxing*; that is, if the Rind is not liquefied ſo much, by the Sap, as to part from the Wood, on bending down a Plaiſh. If it is, this Work (let the Occaſion be ever ſo preſſing) muſt be let alone; becauſe, if it is performed at ſuch a Time, it would ſurely kill ſo much of the Hedge, as where the Cuts or Plaiſhes are made. But, where this Work can be ſecurely done, it is of the greateſt Importance to a Farmer; becauſe this Piece of neceſſary Huſbandry is the Foundation of many Advantages to him. It is by a good Hedge that he has not only Fuel for his own Uſe, but alſo, for ſelling ſome to others. By a good Hedge he can keep his Corn, his Graſs, his Turneps, his Rapes, and other Vegetables, from the Rapine of ill Neighbours, in a much ſecurer Manner than thoſe Farmers can, who ſow theſe in common, open Fields; not that a *Chilturn* Farmer can ſay, I will loſe none of them: No, there is none can ſay this, becauſe the common Sort of Hedges is not capable of preventing the arch Thief; but a Hedge that is half Thorn, and plaiſhed, and made

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to grow very thick, and to a good Heighth, may intimidate the leſſer, younger Thieves, and Women, from attempting to ſteal the Farmer's Corn, and other of his Field Ware, for fear the Difficulty of going backward and forward, over his Hedges, ſhould betray them; which ſometimes happens, by the crackling Noiſe of the Wood, or by a Perſon's lying as a Spy, in Ambuſh, by the Cover of another Part of the Hedge. An old Farmer of my Acquaintance ſowed a four Acre Field with Turnep-ſeed in 1743, which taking all over the Land very well, he beſtowed due Houghing upon them, and they proved a fine Crop. Now this incloſed Field, though it lay but about a Hundred and Twenty Poles off his Dwelling-houſe, yet, I heard him ſay, he did not expect to enjoy the Benefit of above two Thirds of the Crop, becauſe a Path-way lay through this Field, which gave the Pilferer a very great Opportunity to carry off his Plunder; however, as it happened, he got three and twenty Shillings for every Acre of theſe Turneps, after they had been heartily thinned by Mr. Thief, by ſelling them to a Butcher, that fed them off with his fatting Sheep. This ſhews how neceſſary a good Fence is at all Times, to be kept up; for, at beſt, few Farmers are free from more or leſs of their Rapine, eſpecially thoſe, who are either lame or decrepid by old Age, or live at a great Diſtance from their Out-fields. Cattle are likewiſe reſtrained from getting out of an incloſed Field, where the Hedges of it are in good Order, as well as others, from getting into it. It is by this great and ſtrong Barrier of a good Hedge, that Night-rogues are prevented turning in a Cow, Horſe, or Sheep, into a Field, for filling their Bellies at the Farmer's Coſt; which I have known done by a petty Dealer, or Higler, who, keeping a ſcrub Horſe, for carrying Fiſh about the Country, would turn him, by one Means or other, into a Field, late

at

at Night, and fetch him out early in a Morning, before any of the hard-working Farmer's Servants were up. By a ſtrong Fence, the great Damage of paying Coſt for what any ſtray Cattle may occaſion, by their breaking into a Neighbour's Field of Corn, is avoided, and the Farmer made to enjoy his Sleep with the greater Aſſurance, when his Field is ſurrounded by an able, well-made Hedge, and Ditch. In 1742, I had a Hedge made, and a Ditch, three Feet wide, in all, from the live Stake, ſcowered ſo deeply up, as to raiſe the Earth on the other Side eighteen Inches higher than the common Surface of the Ground; and though this was almoſt a haſel Hedge, yet, by the Help of ſuch a deep-ſcowered Ditch, and laying down the Plaiſhes thicker than ordinary, the Hunters, Shooters, and Poachers, have not ſince been able to preſs it ſo much as to give any Cattle of my own, or Neighbours, Room to go out, or into it, by any Gap; whereas heretofore, when the ſame Hedge has been made, and the Ditch ſcowered up, by a bad Workman, there has been conſiderable Damage done by my Neighbours Cattle breaking into my Field, and mine into theirs. This is enough to ſhew the Value of an ingenious Workman, or Hedger, whoſe Perfections, were I here to deſcribe, would take me up more Paper than at this Time I am willing to employ, and therefore ſhall poſtpone his Character to another Opportunity; in the mean Time, I have this to acquaint all Gentlemen with, who are Owners of incloſed Lands, or that may be incloſed, that the Country I live in is juſtly famed for the beſt of Workmen-hedgers, who are ſo valuable to Farmers, who occupy incloſed Fields, that ſuch a one better deſerves ſix Pence, where a bad Workman does three Pence; becauſe, whether it be well, or ill made, it requires to lie nine Years, at leaſt, before it can be made again; and, if it is not well made at firſt, it

expoſes the Farmer to a great deal of Damage that may happen in that Time. If Hundreds of Gentlemen, therefore, did but know, how profitable ſuch a good Workman would be to them, I am perſuaded, I ſhould have Letters in great Numbers ſent me to help them to ſuch, though they gave extraordinary Wages for him. But, if I miſtake not, the main Reaſon, why many Gentlemen do not ſeek out for ſuch a good Workman-hedger, is, becauſe they have not a true Notion of the right Method of planting and plaiſhing Hedges; this I am the more ſanguine to believe, from what I myſelf have heard in ſeveral Parts where I have travelled. They have thought their Workmen made and plaiſhed Hedges in ample Order, when, I think I may ſay, they were of the worſt Sort. Therefore it behoves Perſons either to believe my Deſcription of a good Hedge, or better to travel, and ſee thoſe that are made, which exceed their own; and theſe, I preſume, I may ſay, are to be viewed in *Hertfordſhire*, where ſeveral Sorts of them may be ſeen in the greateſt Perfection. The Alder, the Willow, the Sallow, the white Wood, the Poplar, and the Withy, in moory, or watery Grounds; the Silver Beech, the Horn Beech, the Maple, the Haſle, the Witch-Elm, the Aſh, the Oak, and the black and white Thorns, with ſeveral other Sorts, in drier Soils, where they grow in great Variety of Beauty and Profit. And therefore, if any Gentleman pleaſes to ſend to me for a Servant, that is capable of performing this excellent Work, let him not grudge to give him ſome extraordinary Encouragement, becauſe a good Hedger may lay a Foundation, at his firſt planting a Hedge in right Order, for producing a vaſt Profit afterwards, even, perhaps, for Hundreds of Years to come; for a Hedge well planted at firſt, and well managed afterwards, may be prevented from ever being deſtroyed by Age; becauſe there is a Way to be practiſed by

a Man

a Man of Judgment, to renew an old one in ſuch a Manner, that no Time need be loſt in ſuch its Renewal. Hence I am obliged to give Notice, that if any Perſon ſends to me for a Servant that can hedge, as well as do other Work, in the Farming Buſineſs, he ought to ſend me a particular Account of the Nature of his Soil, and the Situation it lies in, that I may know the better how to make Choice of, and ſend him one that underſtands that Sort of Hedging proper and ſuitable to his Land; for there are moory or marſh Land Hedgers, Vale-hedgers, and *Chilturn* Hedgers: That is, there are ſome, who are ſo much uſed to work on their particular Sort of Hedges, that they can do no other rightly. For Example: A Vale-hedger is uſed to renew, or make his Hedges in the Way, they here call *Backing* it; which is ſo much contrary to the Mode a *Chilturn* Hedge is made in, that he is a perfect Stranger to it. Again, a *Chilturn* Hedger is ſo much uſed to laying down his Hedge by Plaiſhes, that he is as great a Stranger to the Vale-mode. And, for the marſh or moory Land Hedger, he is better acquainted with planting, and cutting up, or plaiſhing an Alder, a Withy, a Willow, or other Water-wood Hedge, than either of the other two. But, to come nearer the Matter, I muſt further obſerve, that it is not only Planting or Plaiſhing any of theſe Hedges, there is another main Article ſtill behind; and that is, how to cut the proper Wood out, and, afterwards, how to make the moſt of it to the Owner's greateſt Advantage.

CHAP. XIV.

Of the Gypsy-Vagrant.

A Further Account of the Damage that the Gypsy-Vagrant does to the Farmer and Country in general.— It may, perhaps, be thought by some Persons, that I here busy my Pen in writing on too mean a Subject, when I write of the Gypsy-Vagrant, in Neglect of others of greater Importance; But, were they to live in the County of *Hertford*, where I do, or in any of the Counties frequented by these Cheats, I dare believe they would be of another Mind, and think it a most necessary Article; which I chiefly write on to apprize our Legislators of the horrid Damage that the Farmers and Country, in general, sustain by these arch Thieves travelling up and down it, as it were, in Masquerade; because their Men appear only in the Night-time, unless it be in their Journeying; And, tho' their Women do it in the Day, yet it is under the Disguise of their being only a Company of poor Women and Children, that beg to live on the Charity of good People; and that they may get the nearer Access to the Persons of both Master, Mistress, and Servants, they wrap themselves up in cold Weather, in a Blanket, and at the Door beg in a most ardent Manner; and, if this is not like to succeed, they alter their Language, and fall to telling a little that is to happen *in futuro*, or Time to come; but, if they will give them a Bit of Money, they will tell them the Whole of what good Fortune is to befall them, with a deal of bombast Stuff that they are not at a Loss to express. But let such know, that it is not in the Power of any wicked Person, to give an Account of any Thing that shall certainly come to pass; no, this is not in the Pow-

er of the Devils themſelves, as the learned Author of the Book of Apparitions well obſerves; but is altogether confined to the Knowledge of the Almighty God, the Creator of all Things, and ſupreme Governor of all Events, bleſſed be his Name for ever and ever. *Amen.*

Of the Gypſy Cant, whereby they can talk on the Spot to their Comrades, for deceiving honeſt Perſons, with the greater Subtlety. — This they do oftenеſt, when they are in Company with honeſt People, for a more knowing one to give his timely Advice to a more ignorant one; or to give Notice of a favourable Opportunity to ſteal, or deceive, *&c.* They partly for theſe Purpoſes make Uſe of an *Iriſh* or an *Engliſh* Cant. — A Houſe, they call a *Ken*; an Old Woman, *a Moat*; a Young one, *a Bloſs*; an Old Man, *a Cove*; a Juſtice, *a Rumbeak*; a Dog, *a Buffer*; Barn, a *Skipper*; a Bed, *a Pad*; Sheets, *a Slade*; Liquor, *Booze*; Milk, *Yearm*; Beans, *Black Jack*; Peaſe, *Trundlers*; Turneps, *Nips*; Door, *a Jigges*; *Wheeze the Moate, and ſhe will tip the Lour*; as much as to ſay, *Beg clean, and you will get ſome Money*; and a thouſand other Terms, invented to deceive, when they are in Company with honeſt People, that they may the more cleverly impoſe on them.

A further Account of the Actions of theſe wicked Gypſy Vagrants. — Theſe Gypſies ought, by no Means, to be ſuffered to travel about the Country, nor Town, becauſe they are not only a Nuſance to to the Farmer, but likewiſe to the Shop-keeper, as may appear by what follows: Both the Men and Women Gypſies confine not their villanous Actions to the Farmer alone; they extend them to all Places where they can find an Opportunity. As they have one, two, or more Horſes, or Mules, or Aſſes, commonly with them, they ſerve their Turn to bite the honeſt, ignorant Shop-keeper, eſpecially

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ſome in Country Towns: They go into a Shop and cheapen ſeveral Sorts of Goods, telling the ignorant Maſter or Man, or his Maid-Servant, that they deal in ſelling of Linnen, Woollen, Ribbons, Garters, and other Sorts, and have a Licenſe for ſo doing; and I have been told, that one in their Gang has had a true one that they take out for the Purpoſe, in order to cloak their Villany with the more Artifice; for by this Means they pilfer ſome, while they are buying others, as being moſt of them Maſters of Sleight of Hand; and, for their greater Safety from being apprehended, they are always at Home, as making a Habitation under a Hedge, or in a Wood, *&c.* when it does not ſuit their Conveniency to houſe; where they hold Councils for executing their black Deſigns, and are ſo readily ſupplied with Proviſions, that their trained Dogs will ſeize and carry off the Booty of live Geeſe, Ducks, Hens, Chickens, Turkies, *&c.* without ſuffering them to make a Noiſe; as their Maſters will in the Night-time, when they rob Hen-rooſts, by putting up a Stick to the Hen's Belly; and, by a little Puſh of it, the Poultry will deſcend on the Top of it, without the leaſt Cry; as I had the Relation of theſe and other Facts from a Woman that begged at my Door, who told me, ſhe travelled with ſome of them to ſee firſt if ſhe approved of their Society (a good one I will warrant you) but forſook their Company in Diſlike. She told me, theſe Gypſies ſeldom ever marry, but live almoſt promiſcuouſly; if a Man do not like his Female Partner, he gives her ill Words, or a Kick, and takes another. On the 6th Day of *June*, 1743, a Gypſy Fellow aſked my Farrier the Way to *Aylesbury*, and he told him; but, in a few Hours after, he ſaw the ſame Fellow, at leſs than two Miles Diſtance (for *Aylesbury* was nine Miles) fiddling to ſome Gypſy Women in a Barn at *Abbery*, and aſked him why he aſked the Way to *Aylesbury*,

Aylesbury, and knew it as well as I. This he denied not, for his Queſtion was made to amuſe People, that they ſhould have the leſs Knowledge of their Rendezvous. There was a Gang of theſe Gypſies met about the 18th of *January*, 1742, conſiſting of five Men, beſides many Women and Children, going into a large Wood of Beechen Trees, near *High Wickham*, in *Bucks*; a Place that ſuits their Purpoſe beſt, and where they pitch their Canopy they lodge and keep Fire. Theſe had two Mules, and two Aſſes, with them. By all which Conveniences, they have the Opportunity of ſtealing Sheep, Lambs, and Poultry; and having got Wood enough, and Privacy to their Deſire, in the Night-time they dreſs it in ſuch Cover, and enjoy themſelves on the Spoil of the Country, moſt commonly in a Dell-hole, or Chalk-pit, till, in a few Days, they remove their Quarters; for their Buſineſs is not to ſtay a longer Time in a Place, than it agrees with their Safety. This Woman told me, they live almoſt three Parts of the Year in *Kent*, *Surry*, *Suſſex*, *Hampſhire*, *Berkſhire*, *Buckinghamſhire*, and *Hertfordſhire*, but commonly leave *Kent* a little while after Hopping-time; for, if they travel and beg there, the People generally throw it in their Teeth — *Where is your Hop-Money, live on that* — This Woman told me, ſhe has not ſeen ſuch a numerous Gang of Gypſies a long Time; for theſe, ſhe ſays, were nineteen in all. There was a Crew of them of about ſixteen at *Charing*, in *Kent*, that lay ready for the Hopping-Seaſon; but it happened that moſt of them fell ſick of a Fever, and ſome of the Small-Pox, and few died; for there was an old ſage Veteran in their Company, who ſold her Gold Rings, and raiſed all the Money ſhe could to defray their Charge, and keep them off the Pariſh; for they take all poſſible Care, to prevent that, leſt it bring them under ſuch an Odium, as would ſoon ſpread

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the Country, and prevent their future Travelling: She farther ſaid, that, had ſhe become one of their Society, ſhe muſt take an Oath to be true to them; and that if ſhe had ſo done, and proved falſe, in betraying or forſaking them, they would contrive ſome ſly Way, or other, to be her Ruin. There were many of them taken up, and proſecuted, for Villanies at *Salisbury*. *Northwood*, near *Dulwich*, uſed to be a great Reſort for theſe peſtiferous Vagrants. They ſeldom go in *London*, unleſs great Neceſſity force them to it; which made one late venture to go into a Shop, and ſteal ſome Ribbons; but ſhe was heartily flogged for it in *Tothill-Bridewell*, *Weſtminſter*. She ſays, that the *Boſwell*'s, the *Draper*'s, and the *Hilton*'s Gangs are much leſſened and decayed of late, by Hanging and Tranſportations; for it is theſe ubiquitarian counterfeit *Egyptians*, that have great Opportunities to ſteal Horſes, and other Things; becauſe they are always upon the Tramp, as the Chief of them did, who was lately hanged at *Aylesbury* for Horſe-ſtealing; and, I hope, if the Vagrant Law is amended, that it may be made more ſevere than ever, againſt this Sort of cheating, thieving Vagabonds in Particular; who, under the Cloak of aſking Charity, commit Thouſands of Robberies, as being a moſt ſubtle, intriguing, wicked Crew.

CHAP.

CHAP. XV.

The Copy of a Letter for furniſhing a Gentleman with Beechen and Witch Elm-Sets.

SIR, *January* 23, 1743.

OBſerving in your laſt Monthly Book for *February*, that you have good Beech-ſets to diſpoſe of at one Shilling and Six-pence *per* Hundred, I deſire you would ſend me five Hundred of them, and alſo five Hundred Witch-Elm Sets by the — Waggon, which every *Tueſday* and *Friday* Morning calls at the following Places near you, *viz.* at the *Crow*, kept by *Jeffry Dudley*, at *St. Alban*'s, at Seven o'Clock; at the *Bell* in *Market-ſtreet*, at Ten o'Clock; and the *Half-Moon*, at *Dunſtable* about Noon. The Price of them, and the Charge of Delivery to the Carrier, ſhall be paid as ſoon as you pleaſe within *London*, or returned by the Carrier to any Place on the Road.

I am your humble Servant.

Direct the Sets to Mr. —— *in* —— Salop, *and let me have a Line of Advice.*

The Author's Anſwer.

SIR,

THE Beech-ſets I can get and ſend you in great Perfection; but the Witch-Elm Sets I cannot promiſe you. I have lately ſent great Numbers of valuable Sets to Gentlemen, and, if I can meet with the Elm Sort, will ſend them among the Beech-ſets. Therefore, if you pleaſe, I will ſend you one Thouſand of Beech-ſets; and, as you have been ſo judicious to inform me of the Time and the Day your Carrier paſſes through *Dunſtable*, I ſhall

take Care to draw them in ſuch due Time, that they ſhall arrive with you in a freſh moiſt Condition, which is the Life of Tranſplanting; but as I cannot be certain of the exact Days, I ſhall deliver them, becauſe of the Chance of froſty Weather, it muſt be left to me to do it by the firſt ſafeſt Opportunity. Pleaſe therefore to ſend —— for one Thouſand of Beech-ſets by your Carrier, and let him leave it in Mr. *Tibbet*'s Hands, at the *Half-Moon* at *Dunſtable*, to be paid me on Delivery of them, and you will oblige,

Sir, Your moſt obedient humble Servant

Little Gaddeſden, W. Ellis.
29 *Jan.* 1743.

A Second Copy of a Letter from the ſame Gentleman.

Salop, Feb. 6. 1743.

SIR,

I Received yours relating to the Beech-ſets, of which I deſire you would ſend me a Thouſand, ſince you have no Witch-Elm left. According to your Directions I have this Day paid ——, being the Sum you charge for them to our Carrier, who, leſt the ſame Man who goes this Journey ſhould not drive that Waggon, by which the Sets are to come, is to leave the Money with the Landlord, at the *Half-Moon* at *Dunſtable* to be paid you on the Delivery of the Sets. I am,

Sir, your humble Servant.

The Author's Remarks on this Gentleman's Letters.

ACcording to this Gentleman's Directions, I ſent him a Thouſand Beech-ſets in fine freſh Order to *Dunſtable*, on the 20th Day of *February*, 1743,

1743, for his planting them in his Park in *Shropſhire*; which leads me to take Notice of the good Notions this fore ſighted Gentleman entertained on reading the valuable Service Beech Trees are of to Deer, Swine, and Poultry, but moſt of all to the firſt; who thereupon forthwith ſent to me for Sets of the ſame, which he was very right in doing, becauſe the freſh Sets that I ſent him, under proper Management, will run into Trees with great Expedition. And, that they may grow the faſter, I ſent ſuch Directions with them, that, if duly obſerved, will forward their Growth at a prodigious Rate; for, unleſs a proper Aid is applied to them in their firſt Shooting, and infant Growth, the Sets will loſe a great deal of Time, which will be prevented by what I adviſed him to make Uſe of; for I have planted Thouſands in my own Ground for making Trees; and, from the Succeſs I have met with, am enabled to adviſe all that buy Sets of me, how they may enjoy the ſame. And what I have further to remark is, that this Gentleman had not only Reaſon to plant Beech-ſets for their growing into fine large Trees; but he had an Eye to their producing of that excellent Seed, called *Beech-Maſte*, which yields Abundance of Oil, of a moſt ſalubrious Nature, to Deer in particular; for the Oil of theſe Kernels, in the cold wet Winter Seaſons, warms their Stomachs, and prevents the ill Effects of the raw, phlegmatic, flaſhy Graſs, that oftentimes cauſes the Breed of the Rot, or Red-Water, in their Bodies, that occaſions the Death of Thouſands of theſe valuable Animals, eſpecially where the Ground they feed on is of a clayey, or other ſtiff, wettiſh Nature, that lodges Rains, and thereby much contributes to the Deer's Deſtruction. This Maſte is likewiſe of a moſt nouriſhing Nature, inſomuch that it ſerves as Part of the Subſiſtence both of Red and Fallow Deer, during ſeveral of the Winter

Months, and thereby helps out the Scarcity of Graſs and Hay, and the more where Swine and Poultry are not admitted to feed amongſt them; for Hogs are ſo voracious of this Food, that they will in a little Time fat on it, if it is a plentiful Maſte Year, which it commonly is, every ſecond or third Year at moſt. I know a Gentleman, whoſe Park abounds with many Beech-Trees, keeps a Thouſand Head of Red and Fallow Deer, that in ſuch a Maſte Year receive a great deal of their Subſiſtence from it; and ſo do near half a Hundred of his Swine, as well as many wild Turkies, that ſometimes perch on theſe Trees, yet do not ſtray ſo far, but he enjoys the Benefit of them: So that here is a double Profit to be expected from planting Beech-ſets, one from the Wood, and the other from the Fruit; and this for a Trifle Charge at firſt, in Compariſon of the vaſt Returns theſe Sets may make in a few Years; for, if theſe and their young Trees are nouriſhed with an agreeable prolific Aſſiſtance beſides the Earth, they will grow up in half the Time they uſually do in their wild Growth. Wherefore it highly concerns Gentlemen, whoſe Land is proper for it, and who have Conveniency for the ſame, to plant the Silver Beechen Set, that will arrive to a Tree ſeveral Years ſooner, and with much more Certainty than Maſte will, though they are carried to a great Diſtance, as I ſhall further obſerve by and by. —— This Gentleman was likewiſe highly in the right, in ordering me to ſend him Witch-Elm Sets, for the great Conveniency and Profit they produce. It it a very valuable Tree in Parks, becauſe it grows a great Pace, and very large in a moiſt Soil, or rather in a Loam, between wet and dry (for this will flouriſh wherever the common Elm does) and becauſe it has a thick pleaſant, ſpongy, ſoft Rind on its Body, Arms, and Twigs, which renders it ſuch an agreeable Brouze

or

or Food for Deer, in hard Weather eſpecially, that they will greedily feed on its Boughs or Twigs that are cut off for this Purpoſe, and love it ſo much, that they will almoſt eat up a ſmall Stick of it; and though this Tree does not yield any Fruit, yet it ſupplies it very much by the quick Growth of its Shoots, that are cut off for Brouſe, and for the nouriſhing heathful Qualities of its Bark, that ſerves to dry up the ſuperfluous Moiſture of their Bodies, and at the ſame Time, as I ſaid, furniſhes them with the Change of a beloved Food. This very ſerviceable Tree may, for theſe Purpoſes, be planted in Rows for making ornamental Viſtoes and Walks, or in other Shapes; and therefore it will be very well worth any Perſon's While, who has a Conveniency of planting this Tree in Parks, or incloſed Fields, to do it with Expedition. And, though I cannot furniſh Witch-Elm Sets to any Perſon this Year, yet I hope to have Plenty of them another. But, to be more compleat in furniſhing a Park with neceſſary Trees for the Service of Deer, there ought to be a ſufficient Number of Horſe-cheſnut Trees planted, that their large Nuts may ſerve as Part of the Deer's Subſiſtence; for theſe Trees, where they arrive to a large Head, will bear conſiderable Quantities of theſe Horſe-cheſnuts, that the Deer will eat; and, as they are of a bitteriſh Taſte, I ſuppoſe they may at the ſame Time become, in ſome Degree, an Antidote to, or Remedy for the Worms. But this is not all: The Horſe-cheſnut Tree, having a moſt light Wood, grows with great Expedition, in either wet or dry Soils, and yields to their Owner a charming Sight in the Spring and Summer-time, by their large verdant Leaves, and fine white large Bell Flowers, that perfume the ambient Air with fragrant Odours, afford a moſt pleaſant Shade and Shelter in ſultry Seaſons, as they ſtand in Rows, and compoſe noble Viſtoes and Walks. Now it is

not

not too late to plant any of theſe Sets or Trees; *March* generally gives us a good Opportunity for this Purpoſe; and, if it is a dry *March*, it is only planting them in a right Manner, and then there is no Danger of their growing well, let the Weather be how it will; for this chief Reaſon it is, that I always ſend, with the Sets or Trees I furniſh to any Perſon, ample Directions for their planting, and cauſing them to run into a quick Growth, being a ſure Method that never fails making Trees grow large in a little Time. A Proof of which I ſhew to any Perſon, that will be pleaſed to come and ſee conſiderable Numbers of divers Sorts of Standard Fruit-trees, growing in ſeveral of my Arable and Meadow incloſed Fields; which generally not only yield me an annual Profit, by their Fruit, but ſerve likewiſe to ſhade and ſhelter my Cattle in the hot and cold Seaſons of the Year.

The Copy of a Letter ſent to this Author, for recommending a Ploughman Servant.

SIR,

I Underſtand you are a Perſon that takes a great deal of Care and Pains to do the World Service in many Branches of Huſbandry; and among the reſt, to help Gentlemen to Ploughmen, capable of performing what they are hired for. This therefore is to deſire you will ſend me one that can act as ſuch, and that knows how to buy and ſell Cattle, and manage a large Farm. Pleaſe to let me have an Anſwer, as ſoon as you can, to

Sir, your humble Servant.

20 *Decem. To Mr.* Ellis, *at* Little Gaddeſden, *near* Hempſtead *in* Hertfordſhire.

The

The Author's Anſwer.

SIR, *Little Gaddeſden, Decem.* 2. 1743.

IN anſwer to yours, this is to inform you, that I have pitched on a Man, that, I think, is capable of giving you Satisfaction, in the Diſcharge of what he undertakes. I do aſſure you, he has the good Character of the Country about him, for an excellent Ploughman; one that underſtands to buy and ſell Cattle, plaiſh Hedges, thraſh and clean Corn, ſow, reap, and mow, and do moſt, or all Work belonging to a Farm; for he has been brought up in a large Farm, and lived all his Life where a great deal of Buſineſs has been done; is a ſober Fellow, not given to Swearing, and Raking about, and, I think, he is one that will make you a compleat Servant, becauſe he has acted as the Head, or Chief one, this two or three Years paſt in a Farm of a Hundred a Year. I am very tender in my Recommendation of a Servant, as well knowing my Reputation lies at Stake; but, was it my own Caſe, I would venture upon this Youngſter, who am,

Sir, your moſt obedient humble Servant,

The Copy of a Second Letter from the ſame Gentleman.

SIR, *January* 2. 1743.

I Received yours, dated the 27th of *December*, and I am pleaſed to find, that you are very modeſt in your Recommendation of the Man you think will ſerve. I would have one that ſhould anſwer the Character that you have given in your Book. I would therefore hope you have taken Care to acquaint him, what it is that I ſhall expect from him, which you can eaſily do, by reading over to him your own Character of a Ploughman; for ſuch a Man,

Man, if he be diligent, and no other, will render himſelf agreeable, for the whole Management of the Farm will lie upon him. As to the Wages, you mention, I am willing to give, on Condition that the Man, by his Performance, anſwers your Character. He may come and try for two or three Months, during which Time his Wages ſhall go on, and we ſhall both be capable of making a Judgment. The half Guinea, with your Charges, ſhall be given you, with Thanks for your Trouble. If there be any further Occaſion of Writing, let me hear the next Poſt; if not, I ſhall expect to ſee the young Man in eight or ten Days at fartheſt. I am,

Your obliged humble Servant.

P. S. *I have thought it proper to acquaint you, that the Man, I hire, is to ſerve the Right Hon. the Earl of* ——— *at* ——— *in* ———

This young Man was hired accordingly, and when the Gentleman ſaw and examined him, he gave him larger Wages, than he demanded, and at the ſame Time ſent me a Gratuity for my Trouble and Charges.

F I N I S.